

Col.
Next address until Friday = Doolys Hotel
Birr

Telephone No. :-
Dublin 62286.

ÁRD-MHÚSAEUM NA h-ÉIREANN
(National Museum of Ireland).

SRÁID CHILL DARA 29
(Kildare Street)

BAILE ÁTHA CLIATH (DUBLIN), 19.....

Hymenoptera from Miss A. R. Crawford.
August 1929.

Abia candens ♀. Cranmore, AN. seen
10.6.29. I

Athalia lineolata ♂ " " " "

Nomada ruficornis ♀ " " " 30.5.29. ill
A very dark var, with black mesonotum & yellow
spots on 2nd segment very widely spaced!

Crabro chrysostomus ♂ " " " 11.6.29. it

C. leucostomus ♀ " " " 24.5.29. row.

Amblystus armatorius ♂ Portlinter, AN. 4-
9.7.29.

Desmophiles caliginosus Grav. ♀ (agrees with
diagnosis + Brauer coll. ♀!) eats
Cranmore, AN. 29.5.29. only
nest

Telephone No.:—
Dublin 62286.

ÁRD-MHÚSAEUM NA h-ÉIREANN
(National Museum of Ireland),

SRÁID CHILL DARA
(Kildare Street)

BAILE ÁTHA CLIATH (DUBLIN), 19.....

Hymenoptera from Miss A. R. Crawford.
August 1929.

Abia candens ♀. Crannore, AN.
10.6.29.

Athalia lineolata ♂ " " " "

Nomada ruficornis ♀ " " " 30.5.29.

A very dark var, with black mesonotum & yellow
spots on 2nd segment very widely spaced!

Crabro chrysostomus ♂ " " " " 11.6.29.

C. leucostomus ♀ " " " " 24.5.29.

Amblystus armatorius ♂ Portlinterae, AN.
9.7.29.

Scenophes caliginosus Grav. ♀ (agrees with
diagnosis & Brauns coll. ♀!)
Crannore, AN. 29.5.29.

Next address until Friday = Dooly's Hotel
Birr

WHITE'S HOTEL,
WEXFORD.

July 23rd - 1929

My dear Stelfox,

Thanks for your letter
received in Cork yesterday.

I am glad to know that the specimen
of A. carbonaria is correct and I
hope that the small Halictus will
prove to be H. minutissimus = punctatissimus.

I caught the A. carbonaria as it
landed, apparently to enter a burrow,
on a bare sandy spot about half-
way up the slope of the upper
pit, so the species evidently nests
in the place. I was there only
(1.30 to 2.30 P.M.)
about an hour when a thick mist

Came on and dispersed all bees.

The little *Halictus* was resting on the face of a cutting in the sand.

If you visit the place please examine a couple of old pits overgrown with brambles. There are some very large burrows in them but it was too cloudy when I was there for the insects to come out.

I got here last night but this has been a very wet day here and I am leaving tomorrow morning.

There is a large colony of bees on the wall of the Wexford bridge, on the sand-pit end, as on Seerawash Bridge!

The specimen of *Meleophila centumularis* was taken flying along the stones of the mud-capped fence by the

roadside at Enniscorthy, the earth on top of the fence is almost "honey-combed" by a great colony of bees.

The enclosed few insects were all taken after 8 P. M. on the evening mentioned!

Glad to hear that you had a good day in the Deputy's Pass.

With kind regards to all

Yours sincerely

R. A. Phillips

Hymenoptera sent by Miss
Agatha Crawford Oct 1930.

- Bombus hortorum ♂ Belfast. 27.8.29!
Vespa norvegica ♀. " (nest). 5.8.30!
V. sylvestris ♀. " 3.5.30.
V. germanica ♀ " 5.8.30.
V. vulgaris ♀ " 3.5.30.
Bombus terrestris small ♀ " 27.8.29.
And. jacobae v. sectica ♂. " 7.5.28.
B. agrorum ♀ " 27.8.29.
Halictus calceatus ♂. " 25.8.29.
Odynerus (immature) ♂
(? pictus or parietinus)
Belfast (bud) 12.6.30.
O. parietinus Belfast. 13.6.30.
And. jacobae v. sectica ♀. " 13.5.30.
very fresh!
Halictus rubicundus fresh ♀ " 29.8.29.
Crabro chrysostomus ♀. " 7.8.29.
And. sericea ♀ Portlallen, AN. 26.8.29.
day out of nest in sand.
Odynerus pictus ♀. Belfast. 4.6.30.
And. jacobae ♂, very fresh, " 21.4.29.
Tenthredopsis " nigricollis " Cam.
"on spinach". ♀. " 12.6.30.

Chasmodon notatarius ♀.

In other log, Cranmore, Belfast. 24.1.30.

Halictus rubicundus ♀. Belfast 1930.

V. germanica ♀ with ! on face. " 6.9.30.

V. rufa ♀. 10.6.29. } Belfast.

V. austriaca. 13.6.30. }

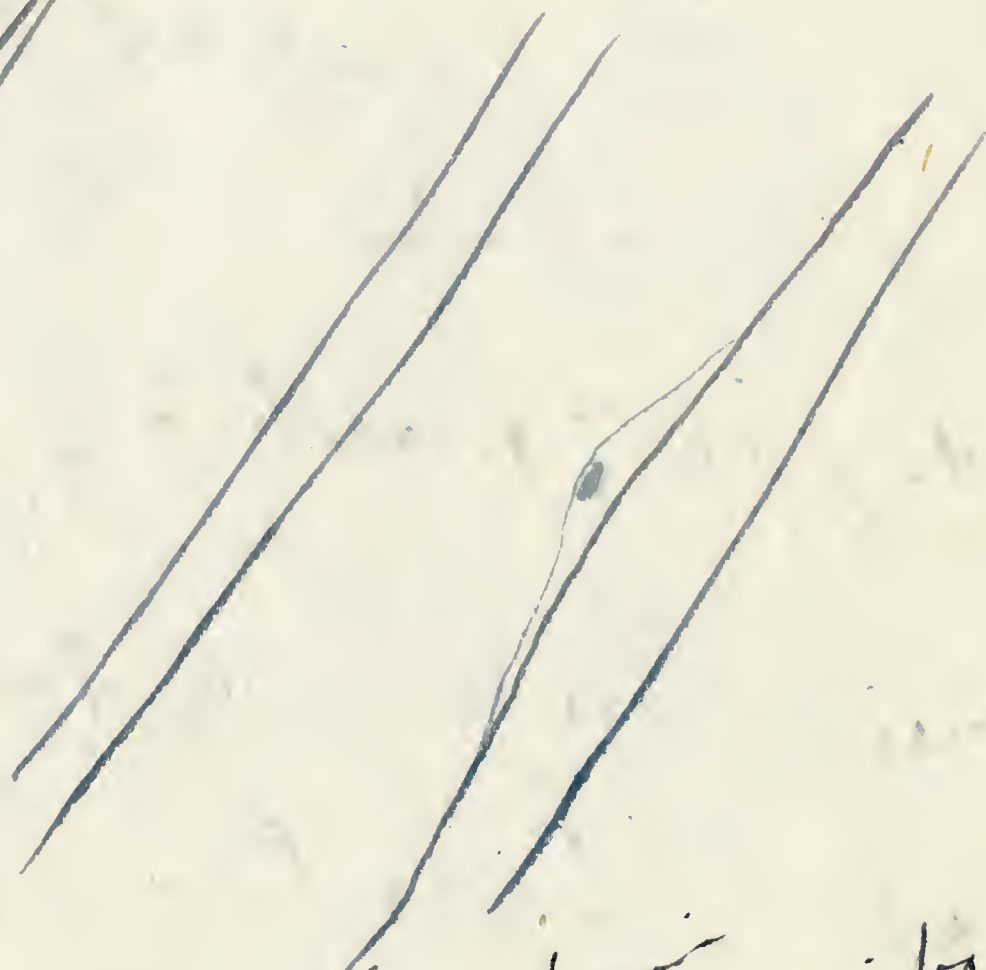
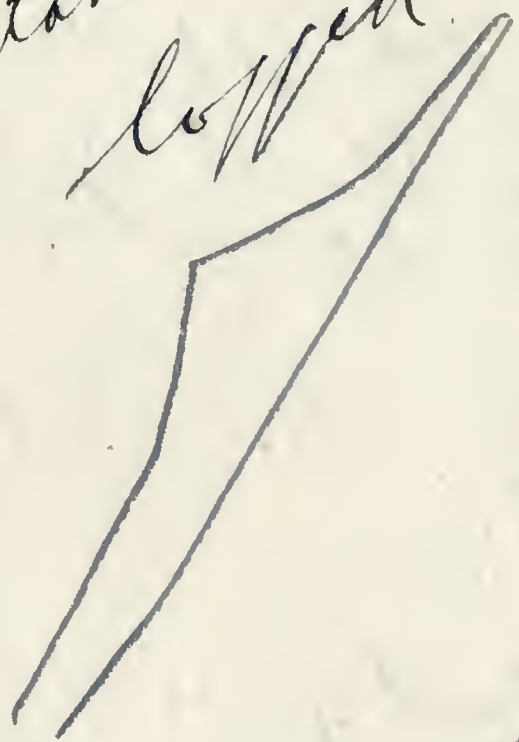
Crabro chrysostomus ♂ 11.6.29. "
very dark!

Formica fusca ♀ found carrying an

Apple 13.5.30.

Myrmica ruginodis ♂ & ♀.

Important records
logged!



C. chrysostomus
And. seneca

Odynerus pictus

O. parietarius

records

still

new

for
both
old

Antoni

Halictus

records

A.W.S.

Spanish Point Co. Cal.
9.11.1930. R.A. Chapin

Ichneumon surpicosus ♀

Colpognathus divinus 2♀♀

Shaken out of roots of
Amorpha in sand dunes.

With postcard dated 3/3/30.

List of Lissonotae & Banchidae sent to S. Roman, Feb. 1930.

= 89 & 90.

Nrs wanted underlined. A. Ru.

1. & 2. L. parallela ♂ & ♀. Brittas Bay, WI. 7.8.1929.

This ♀ is the blackest specimen I have taken!

91

3. L. irrigua or nitida? ♀. Cahore, WX. 15.7.1929.

To judge from descriptions, both ought to be the same species, but

92 I have nothing of this short-tailed species.

4. L. sp.? ♀. Might be a freak of L. bellator but unlike any other specimen I have seen. Wilcarr, CW. 25.7.1927.

Might be a var. of carbonaria Hgn, but I am not quite sure the abd. is normal.

93 & 94
5. & 6. L. reversor ♀ & ♂. Deputy's Pass, WI. 19.7 & 24.7.1929.

I think they are L. palpalis Thun, though having never before
95 seen the species, I may be mistaken. Palpalis ♂ undescribed.

7. L. sp.? ♀. (cf. L. varicosa). Clons, WX. 17.7.1927.

96

8. L. sp.? ♀ (cf. L. humerella). Rathdrum WI. 8.7.1926.
~~Upper Liffey, WI. 2.9.1927.~~

7 & 8 are the same species, L. buccator Thunb. The 1st abd'l segm. is somewhat different in both, but this is accidental; I have seen it before in L. carbonaria & melanist, who are also the same species.

97
9. L. sp.? ♀. Upper Liffey, WI. 2.9.1927.

98. L. buccator Thby, too.

10. L. sp.? ♂. Glen of Inaal, WI. 31.7.1927.

A melanistic ♂ of L. errabunda Hgn (compared with types).

99 & 100

11. L. errabunda ♂ + ♀. Rathdrum, WI. 8.7.1927.

11 is errabunda like 10. No. 12 may be errabunda, but if so it is very minute & smaller than the ♀ types.

101.
13. L. errabunda (?) ♀ Sand dunes, Buttas Bay, WI. 7.8.1929.
= No. 12 ♀, but has yellow points on vertex, hind trochant. red.

102.
14. L. sp. ? ♀ (? L. dubia). Ballyhenry, WI. 29.8.1926.

Not dubia, who has a terebra longer than the body (not rare on spruce here). Very near a n. sp. I have from S. Sweden & from Germany, living on Agropyron.

103.
15. L. sp. ? ♀ (cf. L. transversa). Lucan, DU. 5.8.1923.

This ♀ has very strongly punctured abdomen (seg. 2 + 3!).

104. L. buccator Thunb. ♀. [No. 103 formerly named varicosa by Rev. W. F. J.]

16. L. sp. ? ♀ (cf. No. 15). Lucan, DU. 5.8.1923.

Abdomen less strongly punctured! but ^{with} the same kind of sculpture.

105. L. buccator, w. rudimentary vertical dots. [104 formerly named humirella by Rev. W. F. Johnson.]

17. L. sp. ? ♀ (? cf. Nos. 15 & 16). Drumgoff, WI. 29.7.1929.

= No. 16. It is remarkable none of the present specimens have the

two red facial stripes not rare in Sweden & used as a character for varicosa (Thom.)

106.
18. L. sp. ? ♀ with short terebra. ? bred from pine cones

brought home from Powerscourt, WI. 21.8.1927.

L. culiciformis Cr., dark var.

107.
19. L. chypealis ♂ ♀. Clara, WI. 29.7.1929.

Correct.

103 was marked to piece in return journey. A.W.S.

108.

20. *L. sp. ♀*. Clongal, CW. 9.8.1929.

L. punctiventris Thun. Have no material for comparison at hand.

109

21. *L. sp. ?*. Very small ♀. Sand dunes, Portrane, DU. 31.8.1928.

Unknown to me. Antennae broken, due to the short needle.

110

22. *L. sp. ? ♂*. Taken with No. 21! Looks like a small *L. errabunda*?

Sculpture of abd. much smoother than in *errabunda*. May belong to No. 21.

111

23. *L. sp. ? ♂* with elongate abdominal segments.

Meeting of the Waters, WI. 23.7.1927.

May be a small & dark *L. clypeator* Gr. (*communis* Hgn.).

112

24. *Exetastes sp. ? ♀*. (? var. of *E. guttatorius* with black scutellum)

Kildavin, CW. 9.8.1929.

113

E. illusor Gr. ♀ var *pedibus nigris*. Ant. thinner than in *adpressus* ^(Thunb.)

25

E. fornicator V ♀. Mt. Butler, VT. 17.8.1927.

Correct.

114

26. *Banchus pictus*. ♂ Meeting of the Waters, WI. 25.3.1928.

(described the ♀)

115

B. crefeldensis Ubr. ♂. The northernmost locality known (A. Seyrig has)

27

B. volutatorius ♂. Cahore, UX. 21.7.1929.

Correct, ♂.

116

28. *B. moniliatus*. Ballyvoyle, WA. 27.7.1928.

117

B. volutatorius L. ♀.

29

B. sp. ? (? *compressus*). Powerscourt, WI. 19.6.1925.

B. femoralis Thun ♂.

4, THURLESTONE ROAD,

NEWTON ABBOT,

DEVON.

2. X. 30

Dear Steffen,

I sent you a P.C. to-night before post time to correct an item in the list of spp. I had sent previously.

Your $\frac{1}{3}$ flat larva on Alder is that of Platycampus luridiventris.

Pamphilus larvae are $\frac{1}{3}$ different. Those I have seen have only the 3 pair of true legs - no prolegs on abd. segs - & live either in tubes or cases made of leaves or else gregarious in webs - queer beast, almost repulsive. Your other less flat larvae are one or two species of Nematodes. I have bred the two common ones of the 3 on Alder, & also the one on birch, the larvae of which being black or sooty & not as Ersler's book describe it, puzzled me for a season or two before I got the wings. [I sent you 6♂ of this, caught by John this year] The nearly all green, & not fawn, larva on Alder of the form of Septentrionalis is varius as you suggest. Mem. If you can breed the black Grossus larva of birch, please send me a ♀ or two.

I only bred the 6♂ from those you sent me a year or two ago.

There are also a number of common Tenthredinini larvae on Alder - things like Rhogogaster viridis - but I have never tried to breed these.

Your pink-striped larva on Salix is pretty sure to be Pteronidea curtispina & your white waspy one on Alder may be

4, THURLESTONE ROAD,

NEWTON ABBOT,

DEVON.

Empria pulverata, unless it is a very young Amber or Trichosoma
some spp. of which I believe are two seasons in larval state.

We have really had almost unspeakable weather this September,
& August, except for that super-tropical spell of a few days, was
so bad. When the last bad spell of weather began in September,
i.e. when we still had some sun & warmth ^{occasionally}, our 2nd brood of Pieris
vanillae were fresh & abundant about the house: since then
apparently every one has been killed & there is not an egg or larva
to be found on the cabbages in the garden next to ours, where
usually there are any quantity. I should think it will be
as rare as a Canterbury bell next Spring!

I am even beginning to doubt whether I shall get to the Helictes
angusticeps locality — 3 hours each way! — to dig out ♀♀ this
year. I may trust to the chance of finding them next April &
catching them abroad.

Yours truly
R. C. L. Perkins.

Telephone No.:—
DUBLIN 62286.

ÁRD-MHÚSAEUM NA h-ÉIREANN
(National Museum of Ireland),

SRÁID CHILL DARA
(Kildare Street)

BAILE ÁTHA CLIATH (DUBLIN),.....19.....

Insects sent by George Barnett from
Oven near Linton, Co. LD.
June 14/30.

Andrena fucata 1 ♀.

A. lapponica? 3 ♀♀ covered with yellow pollen.

A. coctana 2 ♂♂.

A. albicans 1 old ♂.

Bombus lapidarius ♀.

Abia sericea ♂ & ♀.

Tenthredo arcuata ♀.

Amphytelus oratorius ♂.

Pimpla torionella ♀.

Mr. Galway, Co. W.G. R.A. Phillips. 1.9.1929.

Sawfly.

Leisonota cylindrator ♂. L. basalis ♂. Glypta mensurator
var. ? with long ovipositor.

Pimpla brevicornis v. large ♀. Schneuwani 2 spp. ♀♀. 1 ♂ ? Spilidura.

Pompilus gibbus large ♀. Crabro vagus ♀.

Shankill, Co. DU. A.A. Lisney. 5.9.1929.

Polyrhina ♀, ? a blackish var. of multicolor var.

Hemiteles ? 2 spp.

Do. do. A.A.L. ^{July} 10.9.1929.

Pemphredon shuckardi ? ♂ + ♀, with very polished + clearly punctured thorax.

Mr. Balbriggan, Co. DU. A.A. Lisney. 12.8.1929.

Schneuwani spp. 1 ♂ + 1 ♀

Valentia Island, Co. SK. Miss M.J. Delap.

Sawfly

Platylabus dimidiatus ♀.

DIARY OF
INSECTS & C., CHIEFLY
HYMENOPTERA
collected by A. W. Stelfox
1929-30-31.

VOL. 3.

EASTER 1929.

28th March 1929. A glorious hot sunny day after a frosty night.

Ballyhenry quarry, WI. about noon.

Bombus sp. heard.

Andrena apicalis? ♂♂ seen.

Halictus rubicundus & *tumescens* ♀♀ seen.

No sawflies: willows very backward & only a few out.

Bombus pascuorum ♂♂ flying over grass in quarry.

28.3.29. Gold Mine Valley, WI. 1-30 till 4 pm.

Bombus jonellus ♀, *B. lucorum* ♀♀ seen.

Andrena minutula 1 ♀ in oak wood.

Vespa vulgaris ♀ taken & released.

No sawflies! Willows: none yet out, very backward.

Cryptopimpla anomala * 2 ♂♂ 1 ♀ flying about Holly in oak woods.

Mollusks:

* *Forsteriella excavata*, green form, under log.

* In May 1929 I sent a ♂ & ♀ *C. anomala* to S. A. Roman of Stockholm as a present & in acknowledging same he said that they were correctly named & that the ♂ agreed with the only ♂ in the museum there but did not agree with Schmiedeknecht's description of ♂ (which I already knew!) A.W.S.

29th March 1929 (Good Friday). Very hot & not a cloud after frosty night.

Left "Merlin" at 6 AM & drove to Wexford to meet Mr. & Mrs. H. Womersley of Bristol. After breakfast spent an hour in sand-pit at N. end of the wooden bridge where took:-

Andrena clarkella ♂

A. nigro-aenea ♂♂ numerous & 1 ♀ seen. All v. fresh.

A. minutula 1 ♂.

Other specimens seen may have been *A. ^{gryneus} clarkella* ♂♂.

Halictus rubicundus ♀ seen.

[NB. *Sphegodes* this in the sand-pit where Phillip took ♀ *Andrena carbonaria* in June 1928.]

Next drove to Clone (Scarawalsh Bridge) 3 miles N. of Enniscorthy where spent a couple of hours & took *Vespa vulgaris* ♀ seen.

Andrena praecox very fresh ♀ at Salix by R. Bank.

Halictus caelestis ♀

Saw very soon Red Admiral butterfly at N. end of wooden bridge Wexford, several times during stay there in the morning.

30th March 1929. Very hot & sunny all day.
 Drove to head of Glencannan & walked up
 to L. Ouler & cliffs of Tonelyle, WI.
 H. Womersley took *Andrena aenea* ^{RCLP} at
 about 1,500 feet: a very early date!!
 On cliff at 2,000 to 2,200 ft., there still were
 drifts of snow took amongst Linum &
 mosses a *Cynipid*

31st March 1929. (Easter Sunday). Windy & a slight
 depression passed over, with a good deal of cloud.
 Spent day in Devil's Glen with Womersleys.
 One bee? sp. seen: no ticks.

1st April 1929. A cold, blustering day with sun
 clouds & slight showers.
 Spent most day at Clara, WI. There nothing seen
 & in afternoon in Dargle where nothing seen
 either. Then home.
 Ground dry in flower in Dargle! Blackthorn out near Arklow.

2nd April 1929. A cold, stormy day, with strong
 N.W. wind but a good deal of hot sun.
 Spent afternoon, with Womersleys, along S. cliffs of Horsh,
 DU. at Drumleek.
Bombus lucorum ♀ seen.
Andrena nigroaenea ♂♂ common.

7th April 1929. A fine mild morning, but depression
 approaching at 11 AM caused cold & mist rain
 all day. Drove Palmer's to Ballyhenry, WI.
 There saw *Bombus lucorum* & *terrestris* ♀♀
 at willows. Then to Vale of Clara & over
 Wicklow Gap & home via Blessington, but
 nothing else seen.

10th April 1929 (afternoon). Drove Glencannan &
 Bohernabreena, DU. ^{with J. G. Palmer!} Very hot sun, but strong cold N. wind.
 Too windy for samples & none seen. Two ticks seen but not
 captured (one was? *Andrena cartmanii* ♀ & at willow).
Andrena clarkella many ♀♀, mostly faded, seen at coomb
 opp. Mr. Doyle's & opposite Brady's.
A. pygmaea ♂♂ & very fresh ♀♀ seen at both places.
A. nigroaenea ♂♂ at first & very fresh ♀ at second place.
A. sericea a few ♂♂ seen opposite Brady's, just below
 spot where on 5th April 192 I saw a doubtful ♀.

10.4.29 cont. Linn Glenasmole.

Halictus rubicundus ♀♀ seen at both places.

Halictus calceatus ♀ seen along river bank.

H. albipes ♀ with last.

H. freygessneri ♀♀ in count opposite Mr. Doyle.

[One very small ♀ only size of *nitidusculus*? this species.]

Nomada leucophthalma 2♀♀, one along W. side of river & the other in count opposite Mr. Doyle.

Vespa rufa small ♀♀ in both places.

Salix fusca ♂♂ both opposite Bradys & opp. Mr. Doyle.

Bombus lucorum many ♀♀, *B. terrestris* a few ♀♀, &

B. jonellus 1 small ♀ seen or taken.

Willow Wren abundant; also Green-headed Vireo & a few ♂ Orange-tips, butterflies seen.

→ many small ♀
H. freygessneri!
AWS. 8.10.29!

14th.

15th April 1929. A dull cold morning with strong cold S.E. wind; clearing at about mid day, but a high mist robbed sun of almost all heat & little out but a few ♂♂ *Andrena*. With J.A.J. Palmer!

12 noon till 12.45. Sunny but very cold strong wind.

Ballyhenry quarry, WI. Took ♀ *Nomada leucophthalma* & Palmer a ♂ *Andrena nigroaenea*. *Bombus lucorum* 1♀ seen.

1.30 till 2.45. Cold minus Valley, WI. No sun & very cold. Collected some larvae of Marsh Fritillary but nothing flying. *Stitchwort* in flower in hedge on road!

3 pm. till 4 pm. Sunny & out of wind.

Left bank of Avonmore (at Ballyorthen gate), Avoca, WI.

Salix fusca ♂♂ & 1♀ (P.)

Andrena pygmaea 1♀ seen. *A. albicans* ♂ on dandelion (P.)

A. nigraea ♂♂. *A. jacobae* ♂ on gorse, others seen.

No sign of any *Halicti* & no ♀ *Andrena* working!

One or two *Bombi* seen, probably all *lucorum*.

One black, slender, ichneumon, 3/4 inch long, seen but missed!

Goldilocks in flower at Avoca.

20th April 1929. A beautiful day till 2pm. but after I reached the ground only five minutes sun & then a cold "jam" formed from NE & no more sun.

Marsh in the Quill channel, Kilmacanogue, WI.
2.30 till 3pm. Cuckoo Flies out!

Dolerus maculatus ♂ & ♀ very fresh.
Andrena albicans ♂♂, A. jacobae ♀ (?), Bombus lucorum
& B. terrestris seen on ♂ willow.

Very nice ground as suspected & this & Kilmacanogue marsh should yield some good things - especially sawflies & ichs. (or scutellars later in summer).

20th April 1929. A cold day with violent NE-E wind, but much sun. MCK, MB & Miss Spiller.
Valley from L. Tay^① to L. Dan^②, WI. 11AM till 4PM.
Bombus lucorum & jonellus ♀♀ at willows at 2.

Andrena jacobae 1 ♂ on willow at 2.

A. clarkella ♀♀ frequent on ♀ willows at 2. Saw one smaller at L. Dan.

A. lapponica one very fresh ♀ on moraine at 1.

Verpa norvegica about larches at 2.

Nothing else seen & practically nothing flying owing to skinning wind blowing right down the valley.

21st April 1929. A very cold day, but almost entirely sunny, though strong wind (E) rendered collecting quite hopeless.

Head of Glenmalur, WI (at foot of Baranore)

With E. W. T. Ratman, Riley, J. Ryan (who ascended Lug!) & Mansfield.

Spent most of day working marshes about the moraine but saw only a few Bombus lucorum ♀♀ on willows & one ♂ Dolerus aeneus ^{RCHB} which lit on a leafy willow bush where I was on the look out for early Pteronidea.

Garlic in flower at N' lat Kennedy.

Bluebells at in Glen of the drom on 23/4/29
~~Cuckoo Flies~~

28th April 1929. Rain all day & cold. NE wind. Drom to Clara, WI. on the chance of it clearing but nothing to be seen by a few ♀ B. lucorum.

ARKLOW SPRING TRIP 1929.

(after the trip returned from chicken-pox!)

30th April 1929. Down to Arklow.

Ballyhenry quarry, WI. 1 - 1.30 pm.

Bombus lucorum + *B. terrestris* ⁽¹⁾ ♀♀. *Andrena*
nigroaenea + *albicans* ♂♂. *Halictus rubicundus*
+ *H. calceolus* ♀♀ seen. *Sphex* *divinus* 1 ♀.
Nomada maculosa 1 ♂.

No wasps or bees seen. Sunny but cold wind.

Marsh N. of Red Cross, WI. 2 pm. Sunny

Dolerus oblongus ^{RCLP.} ♂. (AWS. Oct. 1929.)

Webb's Glen, Ferrybank, WI. 3 till 4.30 pm.

Some sun but mostly cloudy + cold wind (NE).

One ♂ *Contania* sp. swept off willows: see R.C.L.P. notes of 5/2/30!

3 or 4, in the stream. (AWS. Oct. 1929.)

Saw Swifts, & heard hornets + *Sedge Warbler*
Spurred Wood in glen, very torn wings!

1st May 1929. A fine day along coast with cold
east wind; but all cloudy west of Carnew.
Down to Kilearny Bridge, CW via Garry +
Carnew + home.

Rt. bank of Slaney + glen below Kilearny Br., CW.
12 till 2 pm. Practically no sun + very cold.

Lasius flavus? nest in marsh: a large mound!

L. fuliginosus nest going strong in old stump as before.

Myrmica scabrinodis nest under stone.

Bombus agrorum + *lucorum* ♀♀ seen.

Andrena albicans ♂♂ + one fresh ♀ on ♀ willow.

A. rosae 1 ♀ on ♀ willow, quite fresh!

A. nigroaenea ♂♂ + ♀♀ abundant on dandelion about
bridge during only blinks of sun.

Dolerus leucotoides ^{RCLP.} ♂ clinging to willow

One small ink nest off rushes ♂ in marsh.

Cuckoo-pint +
Common Bayle
in flower

1.5.29 cont.

Marsh by stream a couple of miles West of Knock Brandon
WX (between Garry + Carnew.) 2.30 pm. Sunny.

Andrena albicans hundreds of ♂♂. *Nomada lapidea* 1 ♂

Amegilla nemata 2 spp. ♂♂: see RCLP notes, dated 5.2.30.

Pteronidea there labelled 2 ♂♂ flying to willow
"dartmoorensis?" + "mundus?" AWS.

Bombus lucorum + *agrorum* ♀♀ seen.

Cuckoo heard!
Sedge Warbler
seen!

1.5.29 cont.

March in fields West of R. Bann, near road
from Gory to Carnar crosses river, WX. 3.0-4.0 P.M.
Very sunny but coldish wind mostly.

Dolerus elongatus ^{✓ R.C.P.} ♂ & ♀.

D. medius 1 ♂

D. palustris 1 ♂

2nd May 1929. A fine day with much sun.
except from noon till 3 pm when a lot of
clouds about, but very keen wind & little out.

10-30. March between road & railway opposite Glenart House,
WI. Absolutely nothing flying!

11.0 AM till 1 pm. Gold Mining Valley, WI.

Nothing seen but a few Bombs & Holly Blue
Butterfly; but on returning to car took two
surflies at foot of Monaglogh Valley in usual
marsh

Dolerus hematodes ♀ (beetles!).

D. elongatus ♀

2.5.29. Drove on to Clara in afternoon, but
almost quite dull till 3 pm & only warm & really
sunny after 4 pm. Then E. wind dropped.

1-30 till 5 pm. Worked oak-wood from Clara
bridge to 1 mile below Gory Burn.

Bombus lucorum, *agrorum* & *pinellus* ♀♀ numerous at
Vaccinium flowers; saw one or two ♀♀ of *pinellus*.

Psithyrus distinctus several ♀♀ seen.

Andrena albicans ♂♂ seen.

" *lapponea* just ♂♂ & ♀♀ seen.

Halictus rubicundus ♀♀ on sand flat.

Verpa vulgaria, *rupea* & *corrigia* numerous ♀♀
mostly at flowers of *Vaccinium*.

A few species of ichs & one *Bracomis* taken flying
over *Vaccinium* but no trace of *Sphaerium retiosum*
& no *Homocidus* seen with *A. lapponea*.

Several Holly Blues seen & Speckled Woods common.

3rd May 1929. From Exford & back.

A fine sunny day spoiled by cold wind

- Part at Arklow. S.W. at Wexford!

12-30 till 2 pm. Sand pit, N. of wooden
bridge, Wexford where R. A. B. took ♀ Andrena
carbonaria on 7. ^{July} 28! & a second ♀ on 17.7.29! AWS.

Bombus lucorum only ♀ seen

Andrena zevira ♂♂ in thousands; a few ♀♀.

G. nigraea ♂♂ + ♀♀, vom. A. albicans ♀ fresh.

Halictus calceatus, ruficauda, nitidicaulus &

Amulorum ♀♀, [H. punctatissimus ♀
Sphaerodes divinus 300 at Ferry carrig.]

S. very small, divinus ^{1 RCLP.} 1 ♀ in upper sand pit.

Nomada goodwinii ♂♂♀♀ common

Dolurus migratus ^{✓, 22.2.} 1 ♀ near gate at bridge.

Several spp. - yicks in sand pit.

3.5.29 cont.

3-30 till 4 pm. Sand pit by railway at Clonsilla
(Far too windy for collecting!) WX.

Andrena albicans ♂♂ & *A. rufica* ♂♂.

1 sp. ich (Tryphonid) at Salix. etc.

Prithyrus distinctus ♀ at Gorse! ✓ RHP. Also 2ick

4th May 1929. A bad day. Collected *Elanus* ^{migrator, 3072} _{haematodes, 107} Webb's Glen, Arklow.

5
7th May 1929. A fine day of cloud & sunshine.

12 mm tile 2 dm. Marsh between road & rt. bank of

Common about 2 miles above Clara Bridge, W. I.

Salix purpurea ♂

Solen *venens* ✓ 1820. ♀

Labelled
Derrybawn
G.W. AWS.

2-30 till 5 pm. Oak-woods below Clara Bridge
to sand-flat, as usual. W1. Considerably sun!

Bombus lucorum ♀♀. *B. pinellus* ♀♀ + ♂♂. *B. agrorum* ♀♀

Prithyrum distinctum many ♀♀ seen.

Andrena albicans ♂♂. *G. lapponica* ♂♂♀♀.

Halictus rubicundus ♀♀ imm.

Humada or flying over Vaccinium with ♂ A. lapp.

Salix fusca ♀♀ seen in sand-flat.

Pristiphora quercus ♀ swept off Vaccinium in oak-wood.

Pimpla turinellae or several other spp.

6th May 1929. After heavy storm of rain & wind from N. & N.W., it cleared about noon & was sunny but very stormy in afternoon.

Rt. bank of Avonmore between railway & river, opposite Ballyraine, Arklow, WI. 2-30 till 4 pm. No wasps seen in marsh!

Andrena albicans ♂♂ common.

Bombus terrestris 1 ♀ seen. *B. lucorum* ♀♀.

Halictus rubicundus, *calceolus*, *freysommeri* & *tumidus* seen on bank under pine trees by river.

Sphacodon cinereus ♀♀.

Pompilus, red & black (probably *P. gibbus*) ♂♂ seen on bank. 1ick. taken in willow (*Trochilid*).

7th May 1929. Drove to Rathdrum, then picked up Miss Buchanan & Miss Patten, & then on to Glenmalur & ascended the Heron Glen from ford of Baravore, WI. Rain, sleet, hail, snow, &c. most of day till aft. when it cleared. Very deep in snow over 2000 ft. Found the Welsh Puffin (*Meconopsis cambrica*) at foot of gully N. of & opposite the ford of Baravore.

8th May 1929. A fine day, with much cloud & local showers in afternoon.

Sandhills at foot of Three-mile water (Magherakee) WI. as before.

Bombus terrestris 2 ♀♀ seen, *gibbus*, *lucorum*, *agrorum* ♀♀.

Andrena sericea ♂♂ & ♀♀ seen in dunes.

A. picta 1 ♂.

Apis mellifera ♀♀ on edge of dunes.

Osmia aurulenta, very fresh ♀.

Sphex latens 1 ♂ & several ♀ seen or taken.

In late afternoon stopped at Brittas Bay (South) & collected for 15 minutes.

Pompilus gibbus 1 ♀.

Two spp. icks.

Pezomachus 1

9th May 1929. A glorious sunny morning, but dull & cold after noon. Sun down.

Very strong cold E. wind in afternoon.
Drove to Weaford & spent 1 1/2 hours in the sand-pit at N. end of the wooden bridge.
Saw same species as on 3rd inst. with the addition of *Andrena wilkella* ♂ & very fresh & think I saw a ♀. Still no sign of *A. carbonaria* though bees were very active for some time after I arrived & before the sun was obscured by clouds.

Two spp. of iks. very common in sand pit & two small spp. taken in water on arrival.

In afternoon drove home via Blackwater & Courtown & ~~collected~~ ^{stopped} at several places but only caught anything in a marsh S. of Blackwater, where I took two ♂♂ *Pontania* sp.?
surplus at willows & 2 iks.
Took *Ornithopus perparvulus* - sand pit N. of Blackwater.

(*Pontania* sp.?)
See R.I.P. notes of 5/2/30.

10th May 1929. Turning rain it rained all morning but cleared in afternoon. Drove home to Dublin, but stopped at Greystones to get motor jobs done & collected for a few minutes amongst alders in Delgany channel below Glen of the Downs, WI.
Agallia ^{*Sigalphus* sp.?} Very abundant on Alder leaves.
Also 1 or 2 spp. of iks.

END OF ARKLOW SPRING TRIP.

12th May 1929. A fine day with showers (bail s.) & cool strong winds from W & NW. Sun very hot ^{not in low}
Shen out. Drove to "esker" at Long Hill, 2 3/4 miles West of Tyrell's Pass, Co. Westmeath (WH), where collected amongst scrub on SW slope of esker from 1 pm till 3.15 during which time there was considerable sun but several showers.

Saw *Brachy lacoma*, *hortorum* (1) & *apronum* ♀♀.

Andrena jacobii, ♂?, *A. albicans* ♂♂, *A. subopaca* ♀
Habitus rubicundus ♀, *H. calceatus* or *albipennis*?

Continued over leaf →

Labelled N[ew]t[on]low
Co. WH. A.W.S.
12.5.29.

Newtonlow, West of

12.5.29 cont. Long Hill, Tyrell's Pass, W.H. cont.

Sawflies. See RCLP's notes on Empria & Blennocampa of 5.2.30!

Empria sp. ♂ near videns? Empria ♂♂ 2♀♀ cf. longicornis

Blennocampa sp. ♂ (= ? tenuicornis)

Rhagoletia viridis seen flying. Olerus aeneus, small ♂♂ ✓ RCLP.

Abia sericea ♂ resting on Hazel leaf.

Leks. *Leptocryptus elongatus*

Pimpla brunnea ♀ in scrub on moor.

P. turionellae? 2♂♂. + about 6 other spp.

Empria 2 spp.

16th May 1929. A beautiful sunny day, after 3 days gale & showers. Very hot sun but cool wind & too strong in Deerpark for much to fly. Afternoon.

1. Poursuit-demesne, lower end. W1.

2. " " upper end, not far from deer park gate.

3. P. Deerpark, by stream, gate to sawmill.

4. P. demesne, on return in evening, 6 till 6.35 pm.

Bombus lucorum & agrorum ♀♀ seen.

Andrena jacobae ♂♂ & ♀♀, A. lapponica ♀ in "louse-shed" pit by east avenue, A. albicans ♂♂, seen.

16.5.29 cont. Poursuit cont.

Sphurda divisa ♀ on Daisy at 3.

Nomada bipida ♂♂ & ♀, very fresh at 3.

N. marshamella ♂♂ & ♀♀ at 1 & 3.

Salix fusca, large ♀♀ at 3.

Olerus aeneus ♂♂, D. gemmeri ♂♂, D. bimaculatus ♂♂

all at 3, aeneus also at 2 & 4. ✓ RCLP.

Leptocryptus elongatus ♂♂ at 3

Thrinax ^{muta} macula ♂ at 2. ✓ RCLP.

Athalia lineolata ♀♀ at 1 & 3.

Pachynematus scutellatus 1 ♂, 1 ♀, then seen at spruce, at 3

Lygaeomatus sp. ♂ = "abietinus" rather than "saxosensis" see R.C.L.P. in notes of 5.2.30. No doubt this is the 2nd ♂ taken at spruce at 3 as noted above.

Pimpla turionellae ♂♂ at 2 & 4.

P. maculator ♀♀ common at 1 & 2.

Ichneumon filicornis ♂♂ common at 3.

Sp. with red thorax seen on fir tree at 4 on return journey, but missed!

Hemiteles of 2nd & 3rd at 1 by log in field at 1

Hemiteles ^{alpinus} ♂♂ at 2 & 3 by log in field at 2

16.6.29. On the evening of this day I found a drowned ♂ Hylaeus communis in "tub" in garden at Mayfield, Harold's Cross, DU. Res. to Ireland!

✓ RCLP. = notes dated 5.2.30!! See p. 29 →

19th May 1929. A glorious Day! with some high fleecy clouds at times dimming the sun & a keen E. wind in early part.

Drove to Clara, WI, there worked the oak woods below the bridge, to sand-flat, as usual.

11 AM. Stopped at bank beyond Sallyhenry, but sun obscured & cool wind. Took here one *Dolerus oblongus* ^{VRCLP} & several ikes. collected in motor during drive, also 1 ♀ *Melanichneumon sanguinator* taken in motor near Kilmacanogue, VI.

11.30 AM. stopped before marsh & at Garryduff Cross Roads, E. of Brynham, WI, but again no sun & cool wind. Took here several *Dolerus* ^{various}

Bombus muscorum ♀ seen. Also some ikes. & one ♀ *Blennocampa* sp. swept off rushes & in marsh at foot of small channel NE of cross-roads.

12 noon till 5 pm. Perkins (notes of 5.2.30) say this is *B. subcane*?

7 seen
+ *Chryseus pictus*

19.5.29 cont. Clara cont.

12 noon till 5 pm. Oak woods (1), sand-flat (2) and *Osmunda* - swamp behind latter (3) on left bank of Annamore, below bridge. Many willows in full flower, some not out yet.

Bombus lucorum ♀♀ + 1 ♂ (on willow) seen, *B. jonellus* ♀♀ + ♂♂.
B. agrorum ♀♀. *Pithyrus distinctus* ♀♀ seen.

Vespa rufa & *ulgaris* ♀♀ seen.
Andrena ^{*caffer* (fide RCLP)} 1 ♂ very common on willows at 2.

Andrena sericea ♂♂ + ♀♀, *A. albicans* ♂♂ seen at 2

Halictus spp. seen in sand-flat as usual.

Homocidus tipidis ♂♂ + ♀♀ abundant.

Sphex very abundant on sand-flat!
S. divinus, *S. affinis*, & *S. hyalinatus* (?) 3 ♀♀ { See RCLP notes dated 12.2.30! }

Chrysis ignita seen just below bridge. 1st juv 1929.

[No sign of *Arges metallica* in *Osmunda* glade at 3]

Dolerus ♂♂ just below bridge.
Dineura virididorsata ^{VRCLP} (in glade?). *Eucera saliceti* ♂ & ♀ ^{VRCLP}. *Pontania* sp. (like *tella*) ^{VRCLP}.
Pristiphora melanosoma ♀ (VRCLP), amongst *Vaccinium* ♂ at upper end of sandflat.

Braconid: *Ichneutes reunitor* Nees, ♂ (? at willows at 3).

Ephialtes tenuiventris ♂ on birch at 3.
"Correct!" fide Roman No. 79.

Pimpla ^{*inguisitor* Scop. (fide Roman)} *tormentaria* Hartig, ♂. ? *Rure* ♂.
P. ovivora ♂.

Took 2 *Silpha* 4-*punctata* on willow at 3!

21st May 1929. A fine day after very fine week-end, but spoiled by terrific wind in aft.
 Afternoon: Bohernabreena, DU. 2-30 till 4-30.
 Strong to violent wind. Sunked horsehair marsh on right hand side of road 200 yards below lower dam.
Dolerus haematodes 1 ♂, a black ♀? same sp. also seen.
D. dubius ♂♂ common, ♀♀ a few. Then seen seen this species in the other marsh across river!
D. bimaculatus 20 ♂♂, 1 ♀ (? taken on wet slope above marsh).
Loderus vestigiatus ♂♂, typical form, common.
 1 ich. + 1 braconid.

* 26.5.29. [Obahony took ♀ *Eucera salicetis* & *Trichocampa* sp. which at St. Anne's, Clontarf, DU. on 26.5.29!]

29th May 1929. aft. late. A sunny day, but very windy (E).
 Dunsinkham, Co ME.
 (1). "Boj" at Blake's. Here S. Stokes gets Irish Elks.
 (2). Lake site at The Bush, S. of Dunsinkham Work House.
Andrena jacta ♂♂ at 1 & 2. *Halictus calceatus* & *tumescens* at 1.
Dolerus nigratus ♂♂ at 2. *Phaenocarpa myosotidis* ♂ at 1.
Empria sp. (? *tridens*) ♂ at 1. *Tomostethus luteiventris* ♀
 Lks. mostly at 2, but one minor abdomen at 1. One little ♂ has antennae

* I am laid up during perfect week-end of 25th & 27th May, but saw many *Crabro raris* in garden (1st 1929) on 26th!

31st May 1929. Afternoon. Very hot sunny day! Breezy.
 Baily, Co. DU. Cliffs below Miff. Mary's &.
Bombus agrorum ♀♀ seen. *Psithyrus barbutellus* ♀ seen.
Andrena jacta ♂♂ & ♀ seen. *G. villosella* ♂ seen on *Garon. sanguinea*
Halictus rubicundus ♀ seen. *Sphaerod. (? affinis)* ♀ seen.
Chrysis ignita seen.
Terthodopsis ♂
 Large red-bodied Tryphonid on cliffs: 4 ♂♂ = *Cataglyphis* *fulvipes*!
 0.

Small black!

2nd June 1929. A very warm day but cloudy & often drizzling rain. Very little sun & few things out.
 Povercourt - from 11-30 till 5 pm. 1 = demesne in morning; 2 = deer park; 3 = upper demesne in evening.
Bombus lucorum ♀♀ & ♂♂. *B. agrorum* ♀♀ & first ♀ seen.
Vespa rufa, *rufaria* & *norvegica* ♀♀ seen. *Nomada flavoguttata* ♂ at 3.
Andrena jacta ♂♂ & ♀♀ at Hawthorn. *A. caprea* ♀ seen.
Crabro raris numerous ♂♂ seen about logs at 2.
Leptothorax acervorum ♀♀ on stump at 2. Brown cocoon taken in rotten log at 2 from which emerged a ♀ *Pompilus nigellus* on 21.6.29.
Dolerus bimaculatus ♂♂ & ♀♀, *D. gemmifer* ♂♂ & ♀♀ at 2.
D. raris ? ♀ at 1; and ? another ♀ at 2. *D. picipes* ♀ at 1.

2.6.29 cont. Poursuout cont.

Pachyprotasis rapae ^{♀ at 1} *Rhyogaster viridis* ♂ at 2.

Selandria serva ^{♀ at 1} *Selandria stramineipes* ^{✓ RCLP} ♀ at 2.

Pachynematus obductus 2♀♀, one each at 2 & 3 (EOM + AWS 1 each)

Strongylopterus lineatus ♀♀ at 2. *Strombosus delicatulus* ♂♂

Ametastegia equiseti ♂ ✓ RCLP. ♂♀♀ at 2.

Lissonota maculata ♀ at 2. ^{small ♀ with almost white head} No.

Ischnura filicornis ♂♂ & ♀♀ common about 2.

Also many spp. at 2 & some at 1 & 3.

Alomyia debellator 1♂ at 3 (1st 1929!).

7th June 1929. afternoon. A fine day after wet week, warm & little wind & some very hot sun. Drove with Kester & to Liffey Head, Co. WI. & collected beetles in ^{poor} grass on bog but saw only one big macropteran: - *Lissonota* ♀ ^{magdalensis} ^{Bankhead} ^{Roman} ¹⁹²⁹. See note on this ♀ from Dr. Roman on p. 100.

8th June 1929. Evening, after terrific thunder storm. I took a ♀ *Cladonia* *difforma* (very dark ring, 1st largest I have ever seen! RCLP) in W. J. Williams' garden (on Ginkgo!) at Dartry Rd., Rathgar, Du.

9th June 1929. A fine day but only short sun bursts & a strong cool W. wind.

Worked marshes & scrub & in both banks of R. Slaney below George's Bridge (Ballyhubbuck, Glen of Inaal) Co. WI.

Also took a few on left bank above George's Bridge (3)

1 = left bank below & 2 = right bank below bridge!

Bombus lucorum & *agrorum*. ♀♀ only. Former rare, latter common.

Andrena jacta ♂♂ seen. *A. wilkella* ♂♂.

A. angustior a very fresh ♀ taken, heavily pollen laden, on flower of *Galatella palustris* in marsh at 1.

A. fucata fresh ♂♂ & ♀♀ frequent.

Halictus albipes & *tumalorum* 1♀ each.

Promethes ruficornis? 1♂ seen.

Forster myrtaceus 1♀ at 2 in scrub.

Pemphredon lapidaria shuckardi 1♂ on road at 2.

Crabro dimidiatus 1♂ at 3, sent into pocket of my coat!

Dolerus 2♀♀ at 2. *D. lineatellus* 1♂ & 1♀ at 1, ♀ at 2.

Empria sp.? (✓ RCLP) 2♂♂ & 1♀, mostly at 3: see RCLP's notes of 12.2.30.

Selandria flavus ♂♂ at 2. ^{✓ RCLP} *S. serva* ♂ at 2

Tenthredin ♂♂ & 1♀ sent to Miss Scott at 1, 2 & 3.

Tenthredo arenata ♂♂. *Tenthredella meromela* ♂♂ 1st 1929.

9.6.1929 cont. "Ballyhaddock" cont.

Tomostethus laticinctus 1 ♀ at 1 or 2. *Pteronidea rufoscutellus* ^{✓ RCLP} ♂

Ametastegia equestris ♂ at 3 on burdock. ✓ RCLP.

Glypta elongata [?] ♀ at 2 in marsh. *G. similis* [?] ♂ at 3.

12th June 1929. A hot bright morning turning dull at noon & commencing to drip at 3.30 pm & to rain at 6 pm.

Afternoon. Oak-woods &c. below Clara bridge. 41.
as usual. With Miss Knotten & Miss Buchanan to see *Cephalanthus*.

Abia fasciata ♀ on branch in wood above sand flat, hill path, to bridge.

Tenthredella livida ♂. 1st 1929. *Tomostethus laticinctus* ♀♀ seen.

Andrena fucata fresh ♀ & *Vespa* (? *montana*) ♀ very abundant seen. About 12 sp. of bees taken, mostly at sand flat & on oak { the river.

Ichneumon filicornis large ♀

Clara, 12/6/29 cont.

Pimpla oculatoria ♀, *P. vivora* ♀, *P. hibernica* ♀ large, black. ♀

Mesochorus ♀ Red, yellow & black. *Tryphon*?

16th June 1929. A very windy day with heavy rain squalls & rising glass. Wind W. Very little sun but a few hot bursts before 2 pm. With Palmer!

Upper Glensmole & Slade Brook, Co. DU. 12 noon till 5 pm.

Bombus lucorum ♀, *B. agrorum* ♀♀, *B. jonellus* ♀ seen.

Vespa ♀♀ seen at head of narrow.

Andrena cineraria 2 ♀♀ on Cow Parsnip by the Dordder (Palmer).

A. fucata ♂ (Palmer), fresh ♀.

A. tarsata ♂♂ & a few very fresh ♀♀ by Slade Brook (M.D.) & in several other places between that & Dordder (Palmer).

A. subopaca ♀♀ by Slade Brook: one on *Potentilla*!

Halictus calceolus ♀. *H. cinereus* ♀ on *Potentilla*!

Nomada flavoguttata very fresh ♀ by Slade Brook.

[*Chrysis ignita* below Forth Bridge, Bohernabreena (Palmer).

Crabro dimidiatus ♂♂ by Slade Brook in Hazel scrub.

Tenthredo areolaris common. *T. mesomelas* ♂♂ by Dordder.

Tenthredella livida ♀, *T. ferruginea* ♀♀, *T. pallens* ♂ by Slade Brook.

Rhyssalus viridis ♂♂ common. *Pachyprotasis antennata*, 2 ♂♂.

Bee - the - Broom -

16/6/29 cont. Slade Brook cont.

Stenopogon lineata ♀♀ very many on broken buds.

Selandria stramineipes ^{VRCLP} 5 ♀♀ on broken.

Phaenocarpa rubicincta ^{VRCLP} ♀ on willow in Hazel scrub.

Pimpla hibernica small ♀ ?

Chistophya incitator ♀

Glypta ^{VRCLP} ♀
= n.sp. ? file Roman No. 84.

[*Glypta* ♂ & ♀, *Phaenocarpa* ♂, *Stenopogon* ♂]

Rest taken by Slade Brook, about 20 yds. Very small white
bud in willow in hazel!

Homocidus simulans Sayon 1 ♀ by Slade Brook co-type! A.W.S. 1940.
formerly thought to be *incisus* Thoms. & Roman agreed to this determination.

16/6/29. In the evening I found a drowned ♂ *Hydraea* ^{VRCLP} *communis*
in tub in garden. Never before seen at "Mayfield" or
indeed anywhere near Dublin!

17th June 1929. Spent late evening, 7 till 8-30
along E. side of lower reservoir in Glensasmole,
DU. Where John S. Barrington reported
Cephalanthus ensipetis & saw three fine
plants of this orchid. Two stations abundant
& freshly hatched on slopes of lower dam.
Collected *Dolerus gresseri* ♀, *Loderus virgatus* ♀,
Tom. *Cuticrinus* ♀, *Tenthredopsis*

& about a dozen sp. of ich.

18th June 1929. A dull very warm, moist day.
Drove L.S. from L. to Dunshaughlin, & visited
Lagore & site of former crannogs, Co. ME.
Collected 3-30 till 6 pm. about the drains & marsh
near the crannogs & in Lagore demesne.

Tenthredopsis

Selandria flavipes ^{VRCLP} ♂

Ametastegia glabrata ♀ ^{VRCLP}

cont.

Stenopogon ^{VRCLP} ♂
= first seen at L. L. L.

18/6/29 cont. Lagore, ME, cont.

Collected many icks. & small braconids.

Perithous meditor ♀ at willow. Leiomus maculatus ♀
at stump.

Chasmodon unep ♂♂♀♀ very common on vegetation in drains.

19th June 1929. A windy day becoming fine & sunny too late, very hot & only short sun bursts. Aft. 3.0 till 5.0 pm. East side of Cora reservoir, Glencree, DU.

Loderm vestigiatus ♀♀, Loderm bimaculatus ♀

Dacnusa maculipes

Tenthredopsis

Tom. luteiventris

♀♀. Tenth. lineata ♂♂♀.

Tenth. maculata ♂♂♀♀. Ametastigia glabrata ♂. ✓ RCLB.

Odynerus parietinus 10♂ by river. Pteronidea myosotidis ♂ ✓ RCLB.

Cont.

19/6/29 cont.

Astiphron alaris ? ♀ swept by river just opp. Bradley's.

Alomyia debellator Hulse ♂.

21st June 1929. A fine day! Late evening, 6 till 9 pm. Down to Ponlaphuca, KD & WI, where collected with the Liffey survey party, but was going in my little in my line out & most succeeded below taking of Palmer or Oshanny. No one sweeping.

Chelozymus lucidus Hal. ? A ♀ swept off ^{ash} tree at dry channel S. of Ponlaphuca, ^{WI.} & below bridge at 9.30 pm.

by E. O'H. { Took many larvae of Proctos. septentrionalis on willow, birch & alder on KD bank: from these emerged, ca. 13.8.29, 27♂♂ & 1♀, all of which were black except 2♂♂.

Tenthredopsis

Selandria stramineipes ✓ RCLB.

Tryphonid taken by Palmer above fall on WI side.

Proctos. ♂♂ & ♀♀ with Chelozymus WI.

21.6.29. Tryphonid ick. hatched from unknown sawfly larva taken in Co. WI. or Co. DU. during 1928.

21.6.29. Mesochorus ♀ taken by A.A. Linsay in St. Pat. Durnis Hospital, Dublin.

23rd June 1929. A glorious hot sunny day, with strong fresh W. wind, after a wet day & dull damp night.

Devil's Glen, W.I., from above.

1. = Upper part above gorge. 2 = Glen proper.

Bombus agrorum, lucorum, terrestris (only on Cow Parsley!) ♀♀.

Vespa vulgaris ♀ seen.

Andrena fucata 1 ♀. A. anderssoni 2 ♂♂ at 1.

Halictus freygesseri 1 ♀ at 2. H. calceolatus ♀ at 1.

Sphex ♀♀ seen at 1 (probably affinis & hyalinatus).

Hylocichla compens ♂ at top of 2, above zig-zag.

H. hyalinatus small ♂♂ at 1 on stones.

Pompilus nigriventris seen at top of 2.

Gorytes mystaceus ♀ at 2. (from the bushes).

Crabro dimidiatus ♂♂ v. common at 2, 1 ♀.

" cetratus 1 ♀ resting in log by path above upper ledge.

"Pachynematus xanthocarpus ant. ♂" RCLP. in list of 12.2.30!

Dolerus niger ♀ at 2? Selandria rufa ♂ at top of 2. RCLP.

Atelid lineolata, Tenth. lineata & mesomela, Strom. delicatula seen.

Strongylopterus lineatus 1 ♂, ♀♀ at top of 2.

23/6/29 cont. Devil's Glen cont. ^{96 by path above} Ephialtes tuberculatus 2 ♂♂, 2 ♀♀ fly over small Ash at 2.

Pimpla nigripes ♀ at 2.

Merisus murinus ♀ at 2.

[A ♂ Automalus albipictus almost certainly seen by road side of path.] ^{A. aglaia out}

Obtained = Anisotoma triguttata Grav. ♀, from ♂ of 1. Kew, Sept. 1920!

26th June 1929. A glorious sunny day, but keen E. wind.

App. 3.0 till 5.0 pm. Stumps & about foot of Altidore

Glen, Co. WI.

Megachile versicolor ♂. ? M. villosa ♂ seen.

Bombus lucorum, terrestris, lapidarius 1 ♀ (first 1929), all ♀♀.

Prithyrus rupestris 1 ♀. B. barbutellus ♀.

Andrena albicans 1 old ♀ on Cow Parsley. A. jacobae 1 old ♀ on same.

A. hilliana ♂♂ abundant & a few ♀♀. A. anderssoni 1 ♀ on Cow Parsley.

Halictus rubicundus, H. tumulorum ♀♀ seen.

Vespa vulgaris ♀♀ at mud-dust heap.

Pompilus nigriventris ♂ & ♀ seen. Ceropales maculatus ♂ & ♀

Crabro dimidiatus & leucostomus seen.

Cont.

26/6/29 cont. Altidore cont.

Foenus affector ♀ taken at stump.

Pteronidea myosotidis ♀ ^{Y.R.C.P.} swept off nettles on road!

Pimpla robusta ♀ at thistle

Pimpla forge, KD=1, W side = 2. Above fall.

Evening 6 till 9-30 pm. A hot evening

28th June 1929. but forge mostly in shade

Ringlet butterflies out!

Odynerus parietarius ♀ at 1.

30th June 1929. Very windy (NE) but hot sun all day after 10-30 AM. 11.30 till 5 pm.

Upper Liffey at Altidore footbridge, Co. WI.

Bombus agrorum & *lucorum* ♀♀ seen, also a few ♂♂.

Andrena wilkella, ♀. *A. cineraria* ♂♂ & ♀♀, some

A. tarsata ♂♂ & ♀♀ - *A. witana* ♂♂ & ♀♀

A. subopaca ♀♀.

Homada ruficornis ♀ ? seen. *A. flavoguttata* ♀.

N. obtusifrons 2 ♀♀. one with two pairs of orchid pollinia on its clypeus!

Halictus ♀♀ of *albipes* & (or) *pygmaeus* seen.

Vespa ♀ seen.

Crabro varius ♂♂, 1 ♀. *C. palmipes* ♂♂ (2 ♀♀?) ^{Ante on swept in marsh above footbridge.}

Pompilus nigerrimus ♂♂ & ♀♀. One ♀ dragging home a spider (Lycosid, very young ^{id. S.R.P.B.}) was attacked by a ♀ *Formica fusca* & a hot fight ensued, both rolling over & over in each others clutches & away from the spider, which was subsequently captured by the *Pompilus* & taken home.

Trichosoma lucorum 3 ♀♀ on birch.

Cimex ~~pavonatus~~ 1 ♀ on birch. *C. femorata*!

Tenthredella livida ♂♂ & ♀♀ seen. *T. atra* ♂♂ & ♀♀ [✓]

T. formiginea ♂♂ & ♀♀. *T. balteata* ♂♂ & ♀♀ common.

30.6.29 cont. Athdown cont.

Rhyogaster viridis ♀ seen. Tenthredo arcuata.

Pachyneuratus "diaphanus" ♂? swept in marshy spot.

Dolerus aeneus ♀. Pachyprotasis rapae ♀

Pimpla turionellae ♀. P. maculata ♂♂.

Meniscus catorator ♀ on head of grass, at N. end of bridge.

Leionota bellator ♂? (1st seen 1929.): rather L. maculata-looking!
^{Leionota ♂, black & red abd. of bellator!}

Euryproctus defectus ?

2nd July 1929 (evening: 5 pm till 8 pm).

R. hippy at Athdown footbridge, Co. WI. as on 30/6/29.

No aculeates seen except a couple of Bombus

lucorum + B. agrorum ♀♀. Dull & warm!

Amblystus oratorius 2 ♂♂ on birch

Tenthredella baltata, linda + atrata.

Rhyogaster viridis ♂♂

Tenthredo arcuata ♂♂ + ♀♀.

Amblystus oratorius ♂♂ on birch.

Phyosphineta madida Hal ♀ = dyspeata Hal ♂

Phytodietus ♂.

6th July 1929. A dull cold day, with NW wind.
Annual ascent of Loughguilla, Co. WI.,
with "A.S.U."

Except a few ichneumonids & braconids taken after
tea by sweeping at Ballinacorney & Ouchong
& myself, no hymenoptera were seen during
the day except a single ♀ *Myrmica scabrinodis*
taken by Ouchong at the head of North Prison
at ca. 2,800 feet under a stone. This ♀ I think
was one carried up during a "flight" the previous
year which had hibernated there during the
winter; there was no sign of a nest or workers.

Gyriscampa forcula 1 ♀ (AWS. & Nixon).

7.7.29. Athdown, WI. cont. Sawflies as before but in addition.
Pamphilius raper ^{R.C.L.P.} ♀ under birch leaf above bridge

Larvae of *Ammonomatus*? collected on willow (*S. avicula*!)
1st emerged 30.4.1930.

7th July 1929. A bright morning & a fine evening,
but no sun between our arrival & 4 pm.

4.0 to 5.0 pm mostly sunny. With Palmer!
Athdown, Co. WI. (left bank of river at footbridge
mostly). Also some ichneumonids ^{Proctos. & Ichneumonids} collected by saw-
dust heap near Kippure Lodge (then labelled
"K" in back of label) & *A. tarsata*, *Salix exaltata* ♂
& *Pompilus nigerrimus*.

Bombus agrorum ♂♂ & ♀♀. *B. lucorum* ♂♂ & ♀♀.

B. hortorum 1 ♀ (Palmer). [*B. muscorum* ♀ flew into motor
about Tallaght on way home!].

Andrena cineraria ♀♀, *A. tarsata* ♂♂ & ♀♀.

A. citana ♂. *Halictus fuscescens* ♀.

Pompilus nigerrimus ♂ seen. *Crabro varius* ♂♂

C. palmipes ♂♂. *C. dimidiatus* ♀ (Palmer)

Selandria morio ♀ ^{✓ R.C.L.P.} on moss S. of river. *Pamphilius raper* ♀ on birch! ^{✓ R.C.L.P.}

P. fuscus pumila 2 ♀♀ on birch! ^{✓ R.C.L.P.} *Pachynematus umbripennis* ♂ ^{✓ R.C.L.P.}

Pimpla maculata ♂♂ & ♀♀. *P. ruficornis* ♂♂ & ♀♀. *P. ruficornis* ♂♂ & ♀♀. *P. ruficornis* ♂♂ & ♀♀.

Physothrips taberosa ♀. *Oteronidea cameroni* dark var. or *O. vittatus* (dark not visible) 1 ♀

bred 6.5.1930 from larvae taken on *Salix*: fide R.C.L.P. in litt. 17.4.31.

In April 1931, when I saw Dr. Perkins at Norton Abbots he said

a ♂ & 2 ♀♀ of this species might be *vittatus*, *cameroni* var. or a

new species! AWS. Some of this material did not hatch till 1931

when 4 or 5 ♀♀ emerged: one of these with saw partly exposed was labelled
by Dr. Perkins to be *cameroni* but a dark var. (See R.C.L.P. in litt. June '31)

✓ *Bombus agrorum* 1934.

[9.7.29. A ♂ *B. agrorum* caught at Mayfield.]

ARKLOW TRIP: JULY-AUGUST, 1929.

12th July 1929. A glorious day, no clouds, no wind.
Left Dublin at 2.10 pm: reached Arklow 4.0 pm.
Worked sand dunes at N. end of Kynock from
4.30 till 6.0, & ditto plus vent bay from
7.0 till 9.0 pm. More out at the later period!

Bombus lucorum ♂♂ common, nothing else seen
& no other *Bombi*.

Megachile maritima ♂♂ common, a few ♀♀ seen.

Colletes picistyrina ♂♂ & very few ♀♀.

Sphex latorius 1 ♀ seen digging hole to hold my legs.
Noctuid caterpillar: carried out loads of sand
left under head with front-legs about 1/8" out;
came out at intervals of 5 to 10 seconds along
backwards & with great trouble. How she
carried the soft sand I could not understand.
Empty hole load not more than 1 to 2 inches from
hole which was vertical, nearly 1/2 inch in diam. &
on flat site.

Pompilus plumbeus ♂♂ & ♀♀. *P. sp.* (? *jillus* ♀ seen)

Tachysphex pectorator a few ♀♀ seen.

Cretus vernalis 1 ♀

12.7.29 cont.

Hedychridium ardens 1 taken, usual seen.

Paniscus testaceus, var. *melanogaster*, large ♀, flying ^{at 8.30 p.m.} in shade of hills under broken near 2nd point.

Small black Aphidid at bent, no visible ♀

Small red Tryphonid in marsh.

Lesionota parallela ♀ at bent 2nd bay.

13th July 1929. A fine day, hot sun & strong cool breeze
after some clouds had covered the sun till nearly 1 pm.

Rathdrum, WI. By station to Annadale, on right bank of river.

Bombus lucorum ♂♂, *B. agrorum* ♂♂. *B. hortorum* ♀♀.

B. jonellus 1 freshly emerged ♀ seen.

Psithyrus barbutellus ♂♂ & ♀ seen.

Megachile villipellus 1 ♀ seen at Annadale post bridge.

M. ruficollis 1 ♀ seen at E. end of same, by stump (left bank).

Andrena fucata, var. ♀♀. *A. cineraria* 1 ♀ seen taking

A. villosella ♀ seen. *A. coctana* ♂♂ & ♀♀ seen.

A. spp. ♀♀ seen (probably *subopaca*, or *minutula* 2nd brood).

A. pygmaea ? 1 ♀ seen 2nd brood.

Halictus rubicundus 1 very fresh ♂ seen.

Halictus spp. ? (♀♀ probably *tumulus*, *fulgens* &

nitidus seen).

13.7.29 cont. Rathdun cont.

Nomada obtusifrons ♂♂ & ♀♀.

Vespa rufa & *rusticaria* ♀♀

Odynerus 3-*fasciatus* ♀ (Thick) near bridge.

Crabro dimidiatus ♂♂. *C. chrysostomus* 2♀♀ near bridge.

C. leucostomus 1♂, *C. rufus* ♂ & 2♀♀. *C. podapicus* 2♀♀ on

first willow near station [no *C. aphidum* seen!]

Pemphredon shackardi, large ♀. *P. lugubris* ♀ seen.

Phygadeuon on *Arum* bridge.

Stenomacrus delicatulus ♀. *Stenomacrus laticornis* ♀♀

Selandria morio ♀ ^{✓ RCLP} on bramble (E.O.M.). *Nematus* *pusillus* ♂ ^{✓ RCLP}

Abia fasciata ♀ on *Cornus* near station

Pimpla instigator 4♂♂ (one with pale stigma) near station

P. ovator var? ♀ near station

P. oculator 2♀♀.

Pimpla sp. ♂ with elongate wings

Glypta mensurator ♂ (?) & ♀ (?) both very small.

Phytodietus ♀ Ph. ♀

Limona bellator ♂. *L. evanescens* ? ♂.

Two found in flower!
just about finished wood
very fresh.

13.7.29 cont. Rathdun cont.

Chelonus small of *sp.* of each of *Chelonus* & *Chelonus*
also small black *Chelonus*

14th July 1929. A blazing hot day, never a cloud!

Clone, by the R. Bann, 3 miles above Enniscorthy, W.K.

Bombus lucorum & *agrorum* ♀♀ seen.

Megachile centuncularis ♀ entering hole in cliff in sand-pit.

Colletes ^{mountanus} ~~divisus~~ ^{✓ RCLP} See his letter & note dated 19.2.30. Abundant colonies on the

parapets of Scarawalsh Bridge on the Slaney,

discovered before our arrival by R.A. Phillip.

C. divisanus ♀♀ ^{✓ RCLP} in sand-pit. One taken on 18/7/27.

C. montanus 1♀ ^{✓ RCLP} " " " " Insects taken at Scarawalsh Bridge on 18/7/27.

Hybaeus hyalinatus ♂ + ♀. in sand pit.

Andrena pumila ♀♀.

Nomada ruficornis ♀ seen by Bann bridge, as in 1927.

Halictus rubicundus ♂♂, *H. calceatus* & *alpinus* ♀♀ abundant.

& *H. rubicundus* & no doubt other spp. but not looked for.

Sphex *divisus* ♀♀ ^{✓ RCLP} *Sph. divisus* very small, worn ♀ in sand pit (Phillip).

Crabro aphidum & *C. tibialis* 1♀ each taken by R.A. Phillip on

alders on left bank of Bann just above bridge at 5 pm.

14/7/29 cont. Clons, WX cont.

Crabro peltarum ♂♂ & ♀♀ in sand pit. *C. hypostomum* ♂♂

C. vari ♂.

Mellinus arvensis ♂♂ abundant.

Odynerus sinuatus 1 ♀

Myrmica melanoccephala 1 ♂ (Phillips).

Salix exaltata ♂♂ abundant, ♀ seen. *Compilus gibbus* ♀ (Phillips).

Eucampa orata ♀ on alder & *Bana* (Phillips).

Amastigia glabrata ♂ & ♀ seen.

Tenthredo areolata. *Tenthredella atra* 1 ♀ (Phillips).

Lissonota bellator 1 ♀

Glypta elongata 1 ♀. *Glypta bifoveolata* 1 ♀

15th July 1929. A cloudless day, with very hot sun & gentle cool NE breeze.

Sandhills S. of Bahr St., WX.

Bombus lucorum ♀♀. *B. hortorum* 1 ♀ on *C. Soldanella*.

B. distinguendus ♀♀ seen on point near dunes.

Megachile maritima ♂, ♀ seen.

Colletes montanum ♂♂ & ♀♀ common. ^{1 RCLP.}

C. picistigma ♂♂ & ♀♀ common. ^{1 RCLP.}

Hyloea minutus, 1 ♀. ~~*Hyloea minutus*~~

Halictus rubicundus, *villorum*, *nitidusculus* & *punctatissimus*

♀♀ on S. side of point, nesting in clay.

Sphaeroder affinis 3 ♀♀, with last.

Vepra rufa ♀ seen.

Pompilus plumbeus ♂♂ & ♀♀ abundant.

P. rufipes 2 ♀♀, one very large, on *Euphorbia*, N. of track.

Tachysphex pectinipes ♂♂. *Ceroptera maculata* abundant.

Hedychridium ardens frequent.

Oxytelus argentatus ♂ & ♀ then stripping the old *Hyly*

wood of *Halidax* n.s. On *Euphorbia*

O. uniglutinis ♂. On *Cnicus arvensis* near track ^{strand}

Crabro werneri ♂♂ & ♀♀. Abundant.

Bombus ? with *Crabro* near a *pygmaea*

15.7.29 cont. Cahore, WX. cont.

Trichocarpus drewseni ^{✓RCLP.} ♂ NEW TO IRELAND.

Allantia cincta ^{✓RCLP.} ♂.

Tenthredo areolaris a few on carrots.

Abia candens ^{✓RCLP.} ♀ on bracken.

Selandria temporalis ^{✓RCLP.} ♀♀ on bracken, near N. of track.

Cladius pectinicornis ^{✓RCLP.} ♀ on bracken S. of track, with *Abia*.

Banchus volutatorius ♂. *Lissonota* ♀ (=*nitida* Bridg. AWS. 1930. ^{synonym, but not known then.} *nitida* Bridg. AWS. 1930. ^{(Roman No.) says spp. app. synonym, but not known then.})

Tricorynus submarginatus ♂.

16th July 1929. Sunny but blowing very hard from S. after a depression had arrived during the night. Very little at! Boat & sandhills N. & S. of Kilmichael Point, former in Wicklow⁽¹⁾ latter in Wexford (2)

Bombus lapidarius ♀♀ common in 1 & 2. *B. lucorum* ♂♂.

B. hortorum ♀♀. (No *B. agrorum* seen!)

Colletes picistigma abundant in 1 & 2.

C. montanus ^{✓RCLP.} ♂, very common on *Jasione* in 2.

16.7.29 cont. Kilmichael, SI & WX cont.

Compilum plumbum ♂♂ & ♀♀ abundant in 1 & 2.

Tachysphex pectinipes ? seen in 1.

Andrena sericea ♀♀ not very common seen in sand hollows in 2.

Small testaceous Braconid swept off (? bracken or but not?) in 2.

Lhs. taken in marsh behind dunes at 2.

17th July 1929. A rather wild day, but a good deal of hot sun & very warm, after a shower at 11 AM. Meeting of the Saters, Arcoa, WI: right bank of Arcoa for a mile above actual meeting!

Bombus agrorum ♀♀. *B. lucorum* ♂ (first 1929) & ♀♀.

B. jonellus ♀♀. *B. hortorum* ♀♀.

Psithyrus distinctus fresh ♂♂. *B. barbutellus* ♂♂.

Andrena denticulata ♂♂ (♀ seen near Glenart.)

A. coitana ♂♂ & ♀♀.

Halictus rubicundus ♂♂ abundant & fresh.

Nomada obtusifrons 1 ♀ seen.

49.

17th July 1929 cont. Meeting of the Station, WI cont.

Crabro dimidiatus ♂ & ♀ P. leucostomus ♀.

C. caripon ♀. C. rufus ♂♂ sem.

Calceola limacina ✓ R. & P. ♀.

Pimpla vivora ♀. Glypta bipunctata ♂.

Large bryozoa 5' tall - out on bluff above Hg.

[On this date, 17.7.29, R. A. Phillips took a 2nd year young ♀ G. carbonaria at NX]

18th July 1929. A poor day, windy, misty rain, hot.
Drove round Tara Hill to Gorey, thence to
Hollyport, through Wicklow Gaps to Ballinglen
& Coolalug oak-wood, then on through Aughrim
to Coats Bridge & back to Glone House, round
top of Gold Mine Valley, down via Monaplogh
to Wooden Bridge & home.

12 to 2.0 pm. Oak-wood on left bank of R. Bann at
Kilnichael Bridge, below Hollyport, LX.

Very good ground, on a good day, for ticks & snuffin

50.

18.7.29 cont. "Hollyport" cont.

Argy restulata ♀ sitting on birch leaf.

Very large testaceans. Brownish ^{angular} to black.

Muscularis 29

Andrena cirtana ♂♂ + ♀♀. + a few common aculeates!

18.7.29 cont. Monaplozh & Coats' Bridge, VI. 4pm.

19th Jul 1929. A hot day, with a good deal of
mist & sun, very stormy along coast & exposed
places inland.

Deputy Pass, W. 1 = left or N. side, 2 = right or S. side.

Bombus lucorum, pinellus, hortorum, agrorum ♀♀.

Brithyrus distinctus ♂♂ & ♀♀ com. } B. tenestrus, full green.

Andrena puccata com ♀♀ in Park. A. cirtana ♂♂ + ♀♀.

Halicis rubicundus part pp. [A. pyrena ♀ rec.]
P.C.R.

Sphæcodon hyalinatus ♀ fresh at -1.

Homada stupida ♀ at 1.

19.7.29. Deputy's Pass cont.

Varpa rufa ♀♀.

Odynerus sinuatus ♀ at bored stump at 1.

Ageria (variegata?) ♂ seen at stump at 1.

Psenulus pallipes ♀♀ at oak shoots at 2.

Psalloecum nemilicornis ♀ at 2.

Pemphredon richardi ♀

Crabro varipes ♂♂ & ♀♀ at 1 (+2).

" *varipes* ♂♂ & ♀♀ at 1 + 2.

" *varipes* ♂ at 1.

Trypoxylon clarivorum many ♂♂ & ♀♀ at old trees
stumps in the ruined "garden" at 1.

Second Irish record!

Foenus affector ♀ seen on same stump, ? any
connexion.

Larvae of *Stenomacrus ferrugineus* taken on willow: 2♀♀ em. ^{Rec'd. on} 20.8.1929.

Perithous mediator ♀ at 1. *Schizopyga atra* 1 small ♂.

Lissonota femorata ♀♀ at stump in "garden" at 1.

L. palpalis ♂♂ abundant at oaks, thistles, etc.; also 2♀♀, same sp. (See Roman Nos. 93 & 94.)

Pimpla oculator ♀. *P. agax* ♀

Glypta mensurator ♀ at thistle head. *G. varicornis* ♀.

Lycorina triangulifera ♀ ? where taken. First Irish record!

Lycorina triangulifera

19.7.29. Deputy's Pass cont.

Amphylus oratorius ♂ at 2.

Braconid: - *Oenone mandibularis* Sex. (? sex), probably on oak near where *Trypoxylon*
seen, at corner (NW) corner of the old garden. AWS. 18/2/1932.

20th July 1929. Very windy & not much sun: morning.

11.30 till 2 pm. Sandhills N. of Kynoch's Arklow to 2nd pt. W.I.

Bombus distinguendus ♀ seen at 2nd point.

Colletes piceitarsis ♂♂ & ♀♀.

Hyalea minutus 2♀♀ on wild carrot, S. of 1st point.

Megachile viciae 2nd bay.

Sphex luteus (♂?) seen in 2nd bay.

Tachysphex pedestris

Pompilus plumbeus & *Ceropales maculatus*

Crabro varipes

Hedychridium ardens.

Trypoxylon & *Perithous* etc. on old ground. AWS.

20.7.29 morning cont. Kynock, Arkelow, cont.

Allantus cinctus ♀. Cladius pectinicornis ♀^{✓RCLP.}

Linonota parallela ♀

Tryphon on carrot.

20th July 1929 cont. Afternoon & early evening.

5 till 7.30 pm. Sandhill at Kilgorman, WX. (with Palmer)

Nothing new in aculeate line seen!

Small black wasps, with white legs
seen in the lake S. of house!

21st July 1929. A very hot day with sun till 3 pm.

Sandhills, S. of Calore P. (as before) WX. (with J.G. Palmer)

Bombus lucorum ♀♀. B. hortorum ♀♀ + ♂, B. lapidarius ♀♀.

B. agrorum ♀♀ rare, B. muscorum 1 ♀ behind dune (O.).

B. distinguendus ♂♂ (+ ? ♀♀ seen) in field above point.

B. jonellus ♂♂ + ♀♀.

Andrena sericea ♀ in sand hollow.

Halictus rubicundus, H. villosulus ♀♀ common.

Sphex affinis ♀♀ at point.

Colletes picistylus + C. montanum ♂♂ + ♀♀.

Vespa vulgaris + V. sylvestris ♀♀.

Compilus plumbeus abundant.

Ceraptes maculatus abundant.

Tachysphex pectinipes ♂♂ + ♀♀.

Crabro vesmali abundant. C. podopneumon behind dune (O.).
? taken in the morning through low dune

Mellinus arvensis abundant.

Sphex luteus ♀ seen (O.).

Hedychridium ardens 2

Oxytelus argenteus ♂♂ + ♀♀ on thistles & spurge.

O. uniguttatus ♂♂ + ♀♀ with last.

Tenthredopsis ♂♂ + ♀ on bracken above pt.

Allantus cinctus ♂♂^{✓RCLP.} common amongst bracken on dunes.

Selandria temporalis ♀^{✓RCLP.} in bracken on dunes.

Eniphagus pallipes (= granulariae) ♀^{✓RCLP.} in bracken on N.W. edge of big hollow.

Cladius pectinicornis ♀^{✓RCLP.}

21.7.29 cont. Calore cont.

Bombus ^{volatatorius} ~~terrestris~~ ♂♂ Roman No. 115. about thistle & bracken!

B. ^{volatatorius} ~~terrestris~~ 4 ♀♀ *Lissonota cylindrica* ♂. *L. parallela* ♀.

22nd July 1929. A pouring wet day with NE wind.

23rd July 1929. A dull morning, but fine in afternoon & nearly sunny (with blue sky northwards!)

Sandhills N. of Puck's Bridge, N. of Arklow, WI.

Bombus terrestris a ♂ on Thyme. *B. lapidarius* ♂♂ & ♀♀.

B. lucorum ♂♂, ♀♀ & 1 fresh ♀ seen. *B. agrorum* ♀♀.

Psithyrus ^{barbutellus} ~~terrestris~~ ♂.

Neopachia maritima ♀♀. *Colletes picistylus* ♂♂ & ♀♀.

Andrena sericea ♀♀ (comm). *A. coitana*, inland of road ♀♀ on thistle.

Sphex lateris ♀. *Pompilus plumbeus* ♂♂ & ♀♀.

Chorebus ~~undulatus~~

Vespa norvegica, *V. rufa*, *V. sylvestris*, *V. mellea* ♀♀ on thistle.

Lissonota parallela ♂.

24th July 1929. A warm day, with a good deal of sun in forenoon, but quite dull after 2 pm.

Deputy's Pass, WI. mostly on N. (left) side.

Accidental mostly on left, but the following add. notes made.

Bombus muscorum several very fresh ♂♂. *B. lucorum* ♂♂.

Psithyrus barbutellus ♂♂.

Andrena denticulata ♂ on Ragwort.

Trypoxylon clavicornis, very common at some two stumps in old "garden" & 1 ♀ taken on other (S.) side of Pass in oak. *Odynerus sinuatus* ♀.

Formica ruginosa 2 ♀♀ seen at stump in old garden.

Bethylid ♂, Chalcid ♀, & other Braconids taken in oak.

Lissonota ♀ on stump in "garden"

Lissonota ~~palustris~~ ♂♂

Tryphonid ♀ with long terebra in log in "garden"

Pimpla maculicornis ♀. *Glypta nigricornis* ? ♂.

Glypta curvipes ♂. *G. flavolineata* ♂, *G. erosum* ♂.

Schizopyga atra ♂. *Schizoloma* ~~repens~~ ♀

Red brachypterous ♀ *Brachypterus* in oak.

57.

24. 7. 29 cont. Deputys Pass cont.

25th July 1929. A dull day with only some
patches of sun in late afternoon.
Drove to Ballinaclesh, thence by Moneymeen round
S. slopes of Broughanmoira to Aghavanagh, W.
& home via Coolballintaggart & Anphriem.
1 pm till 2 pm. stopped at Muchlagh Bridge for
lunch. Here collected some ikes. (mostly on Spruce)
& in rock garden of lodge below same saw
Bombus muscorum ♀, B. agrorum, B. hortorum &
B. lucorum mostly on purple Buddleia, & also
took a Braconid & a couple of small ikes.
Leucospota bellator, a small ♂. L. areolaris ♀

all labelled
Muchlagh
Ow. Valley
C.W. A.W.S.
25.7.29

25. 7. 29

4 till 5 p
at bridge

Lodge [

Vispa rufa

Crabro ruf

Homocidus

Tenthredella

Pimpla ruf

Phytodietus

Plectrocypta

most other

4. 3077 & 5899 of the Apanteles (? other dead in tree!)
These emerged as follows: - 1 ♂ on 28th May, 2 ♂♂ on 4th June, 5 ♂♂
on 9th June 1930.

Meeting of the Waters, Co. WI, 13/10/1929 cont.

In turnip field at 3 I found a batch of cocoons of Apanteles like those of A. glomeratus on a turnip leaf. The following spring I hatched from these:-

1. 4 ♂♂ & 3 ♀♀ of a sp. of Pezomachus (both ^{new} wingless!) the ♂♂ of which run to No. 195 in Schrad. (i.e. P. convenientis Först.)

There emerged as follows: 1 ♂ on each of 1st April, 12th, 13th & 18th; two females on 21st April 1930 & one ♀ on 22nd.

2. 3 ♂♂ & ⁴ ♀♀ of a sp. of Hemiteles.

There emerged as follows:- 1 ♂ on 1st & 1 ♂ on 14th April, the last ♂ on 5th May, 1 ♀ on 9th May & 1 ♀ ^{each} on 12th / ^{13th & 14th} May 1930.

3. 1 ♂ & 1 ♀ Braconid, both of which emerged on 3rd April 1930.

4. 3 ♂♂ & 5 ♀♀ of the Apanteles (? others dead in box!)

There emerged as follows:- 1 ♂ on 28th May, 2 ♂♂ on 4th June, 5 ♀♀ on 9th June 1930.

24. 7. 29 cont. Deputys Pass cont.

25th July 1929. A dull day with only some
patches of sun in late afternoon.
Drove to Ballinaclesh, thence by Moneymeen round
S. slopes of Broughanmoira to Aghavanagh, W.
& home via Coolballintaggart & Anphriem.
1 pm till 2 pm. stopped at Muchlagh Bridge for
lunch. Here collected some ichs. (mostly on Spruce)
& in rock garden of lodge below saw
Bombus muscorum ♀, B. agrorum, B. hortorum &
B. lucorum mostly on purple Buddleia, & also
took a Braconid & a couple of small ichs.
Limnobia bellator, a small ♂. L. exulans ♀

all labelled
Muchlagh
Ow Valley
G.W.I. A.W.S.
25.7.29.

25. 7. 29 cont.

4 till 5 pm. Collected in old oak woods along OW River
at bridge (? Ballyteige Br.) a mile above Coolballintaggart
Lodge [labelled "Ow ^{Valley} ~~River~~"]. Took ♂ Stenopis
Virpa rufa seen

Crabro varius & C. chrysostomus ♂♂. ^{IV. fasciata} (C. patens) on thistle

Homocidus stimpsoni ♂ seen in ferns.

Tenthredella lina ♂ & T. minor ♀ seen.

Pimpla rufata ? ♂.

Phytodietus "gemellus" ? 2 ♂♂ & 1 ♀ on oak.

Plectrocyptus leucopsis ? ♀ on bracken near stumps.

most other species taken in or about oak.

26th July 1929. A dull day, warm, with little or no wind.
Some sun in afternoon.

Drove to Wexford, via Enniscorthy & home via
Blackwater & Courtown. Stopped for lunch at
Ferrycarraig, at Wexford, & for tea at ^{Parr}~~Black~~ Gap
(= Blackwater ^{Head}~~Head~~). All Co. WX.

Field, south of road, 1/4 mile E. of Ferrycarraig, WX.

1 till 2 pm. Sheltered & warm but no sun.

Crabro & *varius* ~~many~~, a species of *Bethylid*,
some *Aphidii* & ichs. Mostly on ^{apple} ~~thistles~~ or along
hedges. Saw tree of *Pyrus* ~~latifolia~~ in apparently
native scrub below field (W. end of).

~~Crabro~~ ~~varius~~ & ~~others~~.

Pimpla examinator ♂. *P. f. near archia*?

Glypta curvipes ♂ ~~one~~, one with almost black hind tibiae.

G. menanator ? ♂ & ♀.

~~Crabro~~

Scrambled Bridge, above Enniscorthy, WX.

Stopped to examine Phillips' colony of *Colletes*
^{montanum} ~~montanum~~ ^{✓ RCLP} in grass, but saw only one, a ♀, on
Leontodon flowers. See R.C.L.P.'s letter & notes dated 19.2.30.

26.7.29 cont.

Wexford, sandpit in field at N. end of wooden bridge.

Here Phillips has taken 299 *Andrena costalis*,
2 till 3 pm. Not a few new moments seen!

Bombus distinguendus ♂♂ quite common, on *Carduus*
arvensis in corner of field west bridge.

Also seen *B. lucorum* ♂♂ & ♀♀, *B. agrorum* ♀♀.

Colletes picistipes ♀ on *Leontodon*.

C. montanum ♀♀ ^{✓ RCLP} on *C. arvensis*.

Andrena clunialata ♀ on *Leontodon*.

Halictus ruficinctus ♂♂ abundant, Ad ♀ seen.

H. lativentris seen ♀ on *Leontodon*.

H. alpestris & *calceatus* & *pygmaeus* ? ? ♀♀ seen.

H. tamulorum ♂ fresh.

H. nitidusculus ^{✓ RCLP} 1 ♂ rather abnormal.

H. villosulus 2 ♂♂.

Sphex divinus ^{✓ RCLP} small ♂. ^{"S. divinus, small" ✓ RCLP} ~~S. divinus~~ ^{✓ RCLP} 1 ♂ & 1 ♀ seen.

Vespa vulgaris nest. *V. vulgaris* ♀♂ seen.

Pompilus gilvus ♂♂, ♀ seen.

Psilidium exaltatum ♀ seen.

Crabro peltarum, seen ♀♀

Meloboris arvensis.

Pachymeniscus
xanthocarpus ♂ auct.
✓ RCLP.

26.7.29 cont. Wexford sand-pit cont.

Lissonota errabunda ♀ ?

Halictus, *Bombus* & *Andrena*

26.7.29 cont.

Sand pit &c: 1/4 mile behind (W. of) Blackwater Head, WX. 4 till 6 pm.

Bombus muscorum 1 ♀ seen &c.

Andrena ~~*saundersella*~~ ^{*saundersella*} ♀. *A. coitana* ♀♀.

A. pygmaea ♀, 2nd brood.

Halictus rubicundus ♂♂.

H. leucopus ♀.

Colletes picistigma ♂. *C. montana* ^{✓ R.C.P.} ♂.

Nomada sturipum ♀♀

Panurginus githus ♀.

Myrmica melanoccephala small ♂.

Crabro palmipes ♂.

Panurginus & *Andrena*

1 ♂ seen
"P. laticollis"

27th July 1929. A dull day, warm in shelter, slight breeze.
Very little out.

Rail drum, W. 200 yards of path S. of goods station
& outside tunnel!

Bombus lapidarius ♀♀ common. *B. lucorum* & *agrorum* ♀♀
& ♂♂ & 1 ♀ of *agrorum* seen collecting pollen.

Pithopius hirtellus & *distinctus* ♂♂.

Andrena coitana ♂♂ & ♀♀. *A. denticulata* ♂ & ♀♀ in
regiment.

Halictus rubicundus ♂♂ & ♀♀. *H. caelestis* 1 ♂.

H. freygessneri 1 ♂. *H. tumulorum* 1 ♂. *H. leucopus* 1 ♀ seen.

Nomada sturipum ♂♂ & ♀♀.

Panurginus nigerimus ♂.

Mullerius arvensis ♂♂.

Crabro ruginus 1 ♂.

Vespa rufa, *vulgaris*, & *rubecula* ♀♀.

Odynerus 3-*faciatus* ♂, very common, on *Clitella*

Tenthredella lineata ♂♂ & ♀♀. *Athalia lineolata* seen.

27.7.29 cont. Rathdrum cont.

Glypta ceratites ♂♂ & ♀. *G. varicornis* ♂, white legs.

G. mensurator ^{a small dark form} ♀. & *G.* ♂ like *ceratites*, but with broader head! sp.?

Leiomota variabilis ♀.

Tryphon elongator

28th July 1929. A deep depression & rain all day!
Drove to Arklow Rock in afternoon & visited
J.G.J. Palmer's station for *Asplenium lanceolatum*.

29th July 1929. NW wind, very strong, but much
hot sun during day.

Clara, bridge to sandflat, left bank of Aronmore, W.I.
as usual. 12 noon till 3 pm.

Salix rostellatus ¹⁰⁷ The habitat for this species is
now much overgrown with seedling birch, gorse &
& no bare ground is visible. Hence the species is very
difficult to observe, but it is still there. A ♀ seen.

29.7.29 cont. - Clara

Odynerus trifasciatus ♂. *Crabro peltatus*, a fresh ♀. *Salix exaltatus* 107.

Vespa norvegica & *myrmica* ♂♂ on Angelica!

No other aculeates of interest seen! *Hydrometopius confusus* ♀

Small black wasp with white legs,

taken on bracken on roadside N. of bridge.

Tenthredopsis ♀ taken by Hugh.

Abia candens ♀ at sandflat, where *S. rostellatus* lives.

Allantus ^{pallipes} ~~intercedens~~ ♂

Physothrips rufipes ♀. *Glypta ceratites* ♂

Pimpla rufata 3 ♂♂, one with black & white legs, the other "red & white".

Leiomota bellator ♀ on Angelica. *L. cylindricator* ♂. *L. elypealis* ♀ {Roman No. 107.

Dyspota praecursor ♂♂ on Angelica (1st seen 1929!).

Antomachus alboguttatus, several seen, one ♂ taken by George in wood
near sand-flat.

Phytodietus 3 ♂♂, 1 ♀

During latter half of July 1929 many ♀♀ & 1 ♂ of *Cratichneumon testaceus* ¹⁰⁷ emerged
from the cocoons of larvae taken on birch at Shankill, Co. DU. by
A.A. Lacey in the previous June!

Shankill 11.7.1929

taken on Angelica in Granite field at sand flat!

29.7.29 cont. Afternoon 3 to 5 pm. Drove up to
Derrybarn & thence on Military Road to Drumgoff
& home via Glennahar, UI.

4 till 5 pm. More by military road, near Ballybrat, above
Drumgoff; took 3 icks amongst leather.

Road by old barracks at Drumgoff; took 2 icks.

Lissonota buccator Thunb. ♀, Roman No. 105.

Glypta 2 icks

30.7.29. A poor day, no sun & misty rain at
times: depression approaching.

31.7.29. First fall of barometer, gale from SW all day
but considerable sun between 10 & 1.30 pm. Showers.

Deputy's Pass, UI 11-30 till 3.30 pm.

Aculeator as before & only additions in *Andrena* small.

Trypoxylon clivicorn not so common at stump in garden
but seen in new spot at lower end of Pass on right side near
fallen (living) oak now!

Stenopogon lineata ♀

31.7.29 cont. Deputy's Pass cont.

Pimpla maculator ♂. ♂.

Physothrips rufipes ♂♂ & ♀. *Schizopyga atria* ♂

Pemania luctica 2 ♀♀ at fallen oak, right side of Pass.

Glypta uraticus ♂. *G. emersum* ♂♂ at fallen oak.

Lissonota *pallipes* ♂♂

Aerocerus *macrobatus*, very large ♂. *Heteropelma calator* ♀.

1st August 1929. A wild day, with rising glass,
heavy showers & much sun between.

Drove to Glenacorney & stayed there till 3 pm but

no hymenoptera seen, except a few *Bombus lucorum*
& *B. jonellus*; then returned to Laragh, where in oak-
wood took a few icks. Some small icks & braconids taken

in motor on both journeys! These labelled

In motor no.
624th drum
G.W. A.W.S.
1.8.29.

Pimpla maculator ♀

Microctonus sp.? ♀ taken in motor in Ardara on return from Laragh. Cf. *M. xanthocephalus* Hal. A.W.S.
but Roman (No. 87) says "*M. cf. testaceus* Gasp. sec. Thoms. but propodeum without a
well defined area petiolaris."

1.8.29. Laragh.

Lamproloma

♂. *Pimpla flavicornis* ♂.

2nd August 1929. A bright day with cold E. wind.
Sunny in morning & evening but almost dull
during middle of the day.

Kilgorman sandhills & WX. 11.30 till 4.30 pm.

1 = N. of lane, 2 = S. of lane.

B. lapidarius 1 ♂, many ♀♀ seen.

Bombus terrestris 1 fresh ♀ & several ♂♂ seen.

B. lucorum ♂♂, fresh ♀♀ & ♀'s. *B. jonellus* ♂♂.

B. hortorum 1 micro ♀ taken. *B. agrorum* ♂♂ & ♀♀.

B. muscorum ♂♂, very fresh. Mostly on rapeseed & at 1.

(*Halictus albipes* ♂♂. *H. freygessneri* 1 ♂. *H. (villanovae?)* ♀ seen.
Psithyrus distinctus many ♂♂ seen.

Vespa sylvestris ♂♂ & ♀♀.

Pompilus ^{pectinipes?} ~~XXXX~~ ♂ on wild carrot at 2.

P. (pectinipes) ♀ seen at 1 (usual sandy bluff).

Salix exaltata ♂♂ & ♀♀ by river stream at 2.

Cerophus maculatus seen.

Crabro ruscicola seen.

Mellinus arvensis abundant at 2.

Aspactes tumida ♀ on rapeseed at 1, below "bluff".

Aspilota *virgata* ♂♂ & ♀♀ on bluff & rapeseed at 2.

Dacnusa *areolaris* & *areolaris* ♂♂ on tall "bluff" at 2.

Tenthredo arcuata common.

Allantia cincta ♂ at 1.

2.8.29 cont. Kilgorman cont.

Leucostoma parallelata ♂♂ & ♀♀ seen & taken at 1 & 2.

L. curabunda ♀ at 2.

[Best taken {stream} at 2.]

Glypta bipunctata ♀ at 2.

G. flavolineata ♀ at 2.

Pimpla brevicornis ♂♂ at 2. *P. maculator* ♂ at 2.

P. debita? ♂ at 2.

Dacnusa at 1 on bent grass.

2.8.29 cont. A few ichs taken on Angelica & railway N. of forey

? none kept!

3rd August 1929. A hot sticky day, with very strong SW wind, after a stormy & very wet night. Sun, very hot when out, but only a little.

11-30 till 1 pm. Walked with Hugh to 2nd pt. N. of Kynock's & collected a few icks. in "strawberry hollow" between 2nd & 1st points, on bracken or amongst same.

Ophion luteus.

Melanichneumon sanguinator ♀

Banchus moribundus.

4 till 6 pm. Walked with Hugh from Eumercilly to Mizen Head & back: by shore, but back through dunes. No sun.

Saw many *Colletes picistylus* near Mizen Head.

Saw also *Tachyphex pectinipes* & *Compilus plumbeus*.

Compilus approximatus ♀ on spurge on gravel flat S. of Mizen Head. Very good ground, covered with *Euphorbia paralias*, *Glaucium luteum* &c.

Tenthredinid ♀ on spurge also.

4th August 1929. After a wet night & morning, some sun in afternoon, but heavy showers. Cool, little wind (V).

12 noon drove to Coolballintaggart & stayed till 4 pm., W.I. Collected in cut-down oak-woods on left bank of O.W. valley

below bridge above Coolballintaggart. ^{all labelled}

O.W. Valley.
C.W. AWS.
4.8.29

Strangalia v. fasciata. Some specimens (♂♂ & ♀♀) on Angelica in swampy spot on hillside. Very likely spot for *Cephalanthus ensipolis*!

Bombus lucorum, *B. agrorum*, & *B. muscorum* seen.

Crabro varius 2♀♀. *C. chrysostomus* ♀ on Angelica.

C. rufus ♀♀ on Angelica.

Forsteria mystaceus ♀ on Angelica.

Glypta ^{antenna} ♀. *Glypta crassicornis* ♀. *G. flavolineata* ♀?
Lissonota ^{bellator} 2♂♂ & ♀ at oak. *L. cylindricornis* ♀ at oak.

Pimpla instigator, v. *intermedia*, ♂ on oak.

Tryphon brachycanthus. *T. elongata*.

4.8.29. In evening took *Chorebus gressinus* ♀ on dunes at Kynock's.

5th August 1929 (Bank Holiday). A dull cold day, after a very bright morning, turning & rain on approach of a new depression in afternoon.

Drove to Scarawalsh Bridge (N. of Enniscorthy) & thence, via Milehouse, to Kiltrea Bridge (River Worin). There collected for an hour in quite good ground with some old oak stumps.

Afterwards drove through Cain, along S. edge of remain of Killarney Forest, past Ballyhyland, N. to Woodbrook, Boladarragh, & Newton Barry; thence home via Carnes & Forey. Some quite promising ground seen along R. Worin about Woodbrook & from Blackin' Bridge to Doran Cross Roads.

At Kiltrea Bridge saw or collected.

Bombus lucorum, *hortorum* ♂♂, *agrorum*
Andrena vintana ♀♀.

Vespa sylvestris ♂♂ & ? ♀♀.

Atthalia lineolata & *Tenthredo areolata* & *Tenthredella lineata*.

Dryopteris praecipua. *Pimpla tunicellae* ♂.

Lissonota bellator ♂. *L. variabilis* ♀, on wild carrot near Milehouse.

Glypta menzurator, small ♀. *G. ceratites* ♂.

6th August 1929. A warm day, with some sun, but numerous thunderstorms.

Kilcarrig Bridge (R. Slaney) Co. CW. & the glen of the GLASHA or GLASHAVEIGH river which flows into Slaney from W. just below bridge. 12-30 till 5 pm. Fine from 1-30 till 4 pm.

Bombus lucorum ♂♂ & ♀♀. *B. hortorum* ♂♂

B. agrorum ♀♀. *B. muscorum* ♂♂ (2 or 3).

B. lapidarius ♀♀ numerous.

Psithyrus distinctus & *P. barbutellus*

Andrena marginata 4 ♂♂, 3 ♀♀ very fresh & almost black specimens. 1 ♂ on *Scabiosa succisa*, rest on *Carduus palustris*. Scabiosa not yet nearly out except for a few flowers.

A. vintana ♀♀. *A. denticulata* ♀♀, one very worn & looked like *villosella*.

Halictus rubicundus ♂♂, *H. calceolus* ♂♂. *H. albipes* ♂♂ & ♀♀.

H. tumulorum fresh ♀ & ♂. *H. leucopus* fresh ♀ seen.

Nomada rufipes 2 fresh & large ♂♂.

Salix exaltatus ♂♂, (small ? ♀ seen of the sp.)

Mellicope arvensis

Certhia virens ? seen. *C. chrysostoma* ♂.

Myrmica schrecki ♀♀ on path W. from Slaney up glen. *Lasius phlogissus* ♂♂ in hundreds, ♀♀, but no ♀ seen!

6.8.29 cont. Kilcory Bridge, CW. cont.

Pachyprotasis rapae ♀

Allantia calcitrans ♂.

Schizura capitata ? ♀

Pimpla instigator v. *intermedia* ♂. *P. tarionellae* small ♀. *Polyphincta varipes* ♀

Glypta mensurator ♂ & 2 small ♀♀ (one with longer terebra than the other). *Pimpla* (?) *detrita* ♂

G. longicauda, fine ♀ & 2 ♂♂; *Limneta bellator* ♂.

Glypta sp. ? ♂, with red hind legs, reddish body, red wings, and antennae & yellowish

7th August-1929. Brittas Bay, S. of Mizen Head, WI.

A dull day, after sunny morning, only 10 min. sun all day.

Pompilus rufipes small ♀. *P. plumbeus* ♂♂ & ♀♀.

Tachysphex pectinipes ♀ one seen.

Sphex luteus, old ♂, with tattered wings.

Crabro vesmali seen.

Mellinus arvensis seen.

Colletes picistigma ♂ & ♀, large.

Limneta parallelata. ♂♂ & ♀♀ common. *L. errabunda* ♀, this sp. A. Roman No. 101.

Pimpla brevicornis ♀. *Cremastus geminus* ♀.

Red Admiral
seen by C.O.
Pompilus seen in
dunes by C.O. only.

8th August 1929. A fine morning, but dull with
showers after 12-30 pm. With C.O.

Drove to Coolballinagart (Old River valley) WI
& collected in cut down oak wood (as before) for
one hour (11-30 till 12-30). Then drove to Agh-
-a-ranagh & over pass to Drumgoff & home via
Glenmalur. Left motor at summit of pass &
walked to Kelly's Lough, where I worked the
scarp S of lake & got *Hymenophyllum wilsoni*,
Lycopodium alpinum, *Vaccinium vitis-idaea*, *Salix*
hercynica, *Sax. stellaria*, many lichens & liverworts
for Miss Knecht & Miss Buchanan; Sub. C. Oldham
worked the lake & took *Pisidium hibernicum*
near outlet & *P. costatum* & *P. tillystoyi* near
inlet (the former in peaty mud & latter only in reddish silt
brought down from gully) but not associated.

8.8.29 cont. Coolballintaggart, W.I. [Ow Valley]
 One ♂ *Strangalia* IV. *punctata* only seen on this day;
 taken by C.O. on *Angelica* by road. *Crabro* *hypostomus* ♀
C. varius ♀.

No new aculeates seen on this occasion!
 Small black sawfly taken on birch: — *Femura pumila* ♀ ✓ R.C.P.
 Ichs almost all on oak.

Glypta crassum ♀. *G. bicornis* v. *rostrata* 2 ♂♂. *G. flavolineata* ♂
G. lineata ♀.

Camponota caligata 3 ♂♂.

Phygadeuon ♂. Not coll. when labelled Jan. 1930 B.W.S.

9.8.1929. Collected at stumps on road above Clonycy, Co. Wick.
 on way to Kilsarry Bridge. *Andrena* *monticola* ♀ 2 birds.

Sialis *caerulea* ♀. *Lissonota* *depressa* 4 ♀♀. *L. ? punctiventris* Roman No. 108.
Mesochorus *impressor* 2 ♀♀.

9th August 1929. A fine warm day, but not much
 sun after 11 AM.

Drove to Kilsarry Bridge, with C.O., & collected
 for 2 hours (1 till 3 pm.) then drove to Kilderin
 where dismissed boys and pits on C.W. (right)
 bank of Slaney & collected from 3.30 till 5 pm.,
 then home via Seaview Bridge & Fern.

1 till 3 pm. Kilsarry Bridge, C.W.

Andrena *lasius fuliginosa* ♂♂ still about stumps but not
 coming into open & no ♀♀ seen. *Myrmica ruginodis* ♀♀ seen.

Two Red Admirals & 1 Speckled Wood at the front north
 "pub" at base of birch tree.

Andrena marginata ♂♂ & ♀♀ taken on *C. palustris* & on the
 first flower of *Scabiosa succisa* that were out, one ♀
 taken collecting pollen on Ragwort!

Odynerus (? *sinuatus*) seen on *Angelica*.

Crabro podagrum at front north birch tree (? at "pub").

Othorini no new aculeates seen on this occasion.

Nomada rufipes ♀ at Tanners by path from bridge to Glasha
 glen.

Allantia cinerea. *Ametastegia equiseti* ♂. ✓ R.C.P.

9.8.29 cont. Kileary Bridge cont.

Hemicopterus ramiculatus? *Glypta longicauda* ♂? *G. mensurator* ♂?
Lissonota bellator ♂. *L. femoralis* ♀. *Pimpla robusta* ♀. *P. brevicornis*? ♀
P. detrita ♂

3.30 till 5 pm. 9.8.29 cont. Kildavin Sand-pit, CN.

Bombus lucorum ♂♂ + ♀♀. *B. hortorum* ♂♂.
B. distinguendus 2 fine ♀♀ seen. *B. derhamellus* 2 ♂♂.

B. nigrorum 2 ♀♀ + one specimen like an old worn ♀ seen.

B. agrorum mostly ♀♀, ? ♂♂. *B. muscorum* ♂♂.

B. lapidarius ♂♂ + ♀♀, some of latter very large.

[*B. terrestris* possibly there but not identified for certain.]

Andrena scitans on Gentians. *A. dentifrons* ♀ on Ragwort.

Halictus rubicundus fresh ♀ seen. *H. alpinus*, *calceatus*, *fulvipes*
 + *H. tumulus* ♂♂ seen.

Sphærodon affinis ♂♂ + ♂ of larger species seen (? *divinus*).

all in *Scitans* minor
or *Scitans* *infa*!

Myrmica schencki ♀♀ in several places. ♂♂ + ♀♀ (winged) seen
 in one place at mouth of nest on side of old pit.

Exetastes illuzovi ♀, Roman No. 112, var. with black legs! others more polished

Glypta ruficornis var. with long wings.

P. brevicornis ♀

10th August 1929. A fine day, but not much sun!

11 AM till 1.30. Askeintony, S. of Arkelv Rock.

Hydrometopius hyalinatus ♀.

Halictus villosulus ♂.

Sphærodon affinis ♂♂ ♀♀ ✓ R.C.P.

Salix exaltatus ♀.

Oedematopsis scabricola ♀.

Lissonota bellator, large ♀.

10th August 1929 cont. 2 pm till 5 pm. Very windy & dull.
 Kilmichael Point, WX to see Mathesia sinuata with C.O.
 Did not collect more than an odd one if any.
^{except} Ocheilus lapidarius in pools on rocks!

11th August 1929. A fine warm day, with considerable sun.

Clara, WI. from birds to sand flat, as usual.

The only aculeates of interest seen or taken were: -

Vespa austriaca many ♂♂ flying round oak on sand-flat.

Salix notata ♀ taken at stump on roadside, N. of Clara bridge.

None seen at usual station on sand-flat.

Pemphredon lugubris ♂ in Osmunda glade at sand flat.

Crabro peltarum just fresh ♂♂ & ♀♀ at sand-flat.

Colletes succinata ^{C. varius ♀. C. palmipes ♂.} very fresh, many ♂♂, a few ♀♀ on edge of sand-flat.

Sphexodes divinus ♂.

Pristiphora melanocarpa ♀.

Pteronidea melanaspis, var. maculiger Cam. ♀, ^{✓ R.C.P.} on birch in Osmunda glade.

Ichneumon delicatorius ♂. Antomachus alboguttatus ♀. Amelylele quadripunctatorius ♀ behind Osmunda glade.
 in oak wood: others seen!

11/8/29 cont. Clara cont.

Lissonota bellator ♂. Pimpla ♂ with yellow scutellum, like P. instigator & intermedia.

Glypta evanescens ♂ in Osmunda glade. Lissonota ♂. Pimpla rufata ♂.

Pimpla ♂, with long narrow abdominal segments & large buccate toruli, very small, amongst Calluna behind sand flat.

Polyrhynchus pallipes ♀.

12th August 1929. A fine day but only occasional sun.

Valley between L. Tay & L. Dan, WI., 12 noon till 5 pm. with C.O.

Bombus lucorum, muscorum, hortorum & agrorum seen.

Andrena crotana 1 ♀.

Halictus albipes ♂♂ & H. calceatus fresh ♀, seen.

Vespa austriaca ♂♂ flying over bracken. V. vulgaris.

Crabro varius, 1 very small ♀. Mellicope arvensis.

Also about 10 spp. of ichs. taken about middle moraine: & the spider Lycosa picta (fide S.R.P.B.) taken in "strand" at L. Dan: 1st inland record for Ireland, I understand! Taken here also on 20.4.29.

12.8.1929 cont. L. Lan cont.

Pimpla rufata 4 ♂♂ (2 with yellow lines on thorax & 2 with humeral dots only).
L. bellator ♂.

13th Aug 1929. A hot day, with SE wind.
 Left bank at 2 p.m. - drove down the hill
 after rain, & saw some birds!

END OF ARKLOW TRIP 1929

18th August 1929. A fine day after 2 bad ones, with
 considerable sun, but cold NW winds.

Provisional - deer park, 451 with Salix.

1 = cliffs on Maulin side (then labelled "cliffs").

2 = floor of deer park

Bombus terrestris 2 ♂♂ on heather at 1. *B. lucorum* ♂♂ & ♀♀.

B. hortorum ♀♀ at 1 & 2. *B. jonellus* 1 ♀ at 1 & ? a ♂.

B. lapidarius ♀♀ & 1 fresh ♂ at 1. *B. agrorum* ♀♀ very rare.

B. muscorum ♂♂ at 1.

Psithyrus distinctus & *barbutellus* ♂♂ & ♀♀. One ♂
 had only 2 rings & 1 fresh ♀ of latter had no trace of any
 rings (it was seen in flowers of ragwort).

Colletes ruficornis 1 very large very fresh ♂ on ragwort at 2.
 at bank of river by road, below saw mill

18/8/29 cont. Deer park cont.

Andrena fuscipes ♂♂ common, 3 or 4 very fresh ♀♀ at 1
 & 1 ♂ at bank by stream near fall at 2.

Halictus rubicundus ♂♂ & fresh ♀♀, abundant.

H. calceatus ♂♂ abundant, 1 fresh ♀ seen at 2.

H. fuscicornis ♂♂ at 1 & fresh ♀ at 2 (also a few ♂♂).

H. tumulorum fresh ♂♂ & ♀ by river ^{below} bridge, near fall at 2.

H. leucopus several ♂♂ at 2. *S. monticola* ♂♂ (seen) at 2.

Sphex (*affinis* ?? ♂ & ♀ seen at 1.). *S. (divinus)* ? 2 ♂♂ at 2.

Homocidus rufipes ♂♂ & ♀♀ at 1 & with *fuscipes* { river
 near fall at 2.

Mellicope arvensis abundant at 2, rare at 1.

Vespa only one specimen seen but ? species

Salix exaltata ♀♀ at 2.

Athalia lineolata common at 1, a good number!

About a doz. of eggs taken at each place (1 & 2) & very many
 seen on slopes in oak wood below cliffs.

Pimpla tenebrosa ♀ at 1. *Pimpla* small ♂, pale stigma, dark hind femora (? *brunneicornis* var.).

Lissonota bellator ♂ *Meniscus impressor* ♀.

21st August 1929. A dull day, with heavy rain at 5 pm.

Upper Liffey, WI. (also Athdown!)

Nothing taken but one ich. amongst heather at ca. 1250 ft near top end of Coronation Plantations.

25th August 1929. A very fine day, with considerable sunny periods & cool N. breeze, but after a very wet week there was not much out.

11.30 - 1.30 pm. The Murrey, S. of Newcastle Station, WI.

Bombus muscorum, *agrorum*, *lucorum* & *lapidarius*.

Pompilus rufipes a fine ♀, dragging home large spider

(*Araneus cornutus* imm. ♀, ^{"almost certainly"} ♂) on beach margin just S. of Station.

P. plumbeus ♂♂ & *P. gibbus* ♀♀.

Ceraphron maculatus on wild carrot.

Tenthredo arcuata very abundant. } in wild carrot.

Chloroceryle inanis very abundant. }

Microcentrum marginator ? ♂ in nest in *Sium*.

Lissonota variabilis ♂. *L. parallela*, small ♂.

Glypta sp. 32nd like *longicauda*, but 4-segmented!

25.8.29 cont. The Murrey cont.

Pimpla brevicornis ♀. *P. turionellae* ♀. *Pompilus* ♂. *Exochus guttatorius* 4 ♀♀.

Cryptid ♀, *Stilpnus imitator*. *Pompilus* at beach margin. *Pomp.*

also *Pomp. gibbus*: has my head under II.

2.5 pm till 5.30 pm. Called at Killoughlin channel, WI to pick up Palmer, who had been collecting "Small Meadow Brown" there. He had also taken

Halictus rubicundus com ♀. *H. calceatus* very fresh ♀.

H. albipes ♂. (George took ^{very small} ♂ *H. villosulus*, ^{very small} ♂.)

Andrena denticulata ♀ (Palmer)

A. m. m. m. Very fresh ♀. (Palmer)

Then on to Ballylusk channel, WI. *Stachys* in flower.

Bombus terrestris fresh ♀ seen. *B. lucorum* com ♂♂.

B. hortorum ♀♀ & fresh ♀. *B. agrorum* ♀♀ very com & fresh ♂♂.

B. lapidarius ♀♀ & ♂♂.

Psithyrus distinctus ♂♂, *P. barbutellus* ♀, *P. campestris*

♂♂ of both pale, dark & intermediate forms.

Andrena denticulata ♀♀.

Halictus rubicundus, *H. calceatus* ♂♂.

25.8.29 cont. Ballylusk, WI cont.

Hyaleus confusus ♀, com, on flower of *Sonchus oleraceus*.
H. minutus ? ♀ on *Angelica*.

Crabro caripum ♂ on *Angelica*.

Odynerus 3. fasciatus ♀ investigating base of flower
 of *Carduus lanceolatus*.

Tenthredo arcuata & *athalia lineolata* common.

Pimpla brevicornis ♂♂ (? at Ballina).

Glypta ceratites ♀. *G. "lineolata"* ♀

Leucospis bellator ♂♂ & ♀♀ seen. *Exetastes guttatorius* ♀.

Ichneumon variatorius ♂♂.

26th August 1929. A very fine sunny day, but
 not many things out, though many winged ants (*Myrmica*)
 seen & caught by netter. Afternoon. With O'Rourke!

Attdown, Upper Liffey, WI. 3 till 5-30 pm.

Spent a few minutes at site of old saw mill at Kippure
 Lodge but saw no sign of any hymenoptera at stump &c.
 then went to Attdown footbridge. Here collected rest of
 afternoon. Very few aculeates seen!

Bombus agrorum & *lucorum* only a very few seen.

Halictus albipes 1 or 2 ♂♂ on Golden Rod & Scabious.

Pemphredon larybeus. 1 ♀

Ichneumon also rare & only a few plants of *Angelica* to be seen.

Dyspates procreator & *Leucospis bellator* ♂♂ & ♀♀ seen.

Leucospis sulphurea ? ♂. *L. errabunda* ♀ ? *Pimpla rufata* ♂

Phytodietus *oxypleus* ? ♂ & ♀.

Small black & pale sp. (like *Halictus borealis* ♂ ?) taken
 by sweeping by O'Rourke in marsh above bridge.

Ichneumon gradarius ♂ (?)

Scytopyga ♀ with narrow base to tibia taken by E.O.H.
at St. Anne's, Blount Co., Ga. on 19.29.

1st September 1929. A fine day after depression, but
my strong SW-W wind & very little sun. Not much
sun till after 1 pm, then all sun.
Sandhills & coast at Portrane, Ill. (With Palmer)

1 = sandhills 1/2 mile S. of anytown.

2 = Coast outside anytown & N. of Martello Tower.

Bombus lapidarius ♂♂ & ♂♂ frequent.

B. terrestris 1 ♂ (also 1 ♀ reported by Palmer.)

B. lucorum several ♀♀ only. *B. muscorum* 1 ♂ seen.

B. agrorum 2 ♀♀ seen only. *B. terrestris* ca. 6 ♂♂
Psithyrus superbus 5 or 6 ♂♂ on Ragwort. ^{? all faded}
Ps. distinctus ♂♂, old & faded, frequent. ^{Ps. superbus! AWS.}

Ps. distinctus ♂♂, old & faded, frequent

All above at 1 (unless marked 2).

Haleitina rubicundus ♂♂ & ♀♀ at 2.

H. calceata ♂♂ at 2. *H. vitidivinus* ♂♂ & ♀♀ at 2.

H. meathamellus ♂♂ & ♀♀ at 2.

Mellinus arvensis a few ♀♀ at 1.

Pompilus fitchii ♀♀ at 1 & 2.

P. plumbeus ♂♂ & ♀♀ (some latter very small) at 1.

Tenthredo arenata & *laticornis* at 2, only 1 or 2.

Spilichneumon viciosus ♂ at 2 (Palmer).

Ichneumon castaneiventris ♀ seen at 1.

Microstigma ♀ at 2 (Palmer).

1.9.29 cont. Portrane, Ill. cont.

Theridion ♀ on carnation at 2.

Pimpla ^{sp. cf. *virginica*} ♂. Most other ichs at 1, unless marked 2.

Lissonota bellator ♀♀ on carnation at 2.

L. commutata ♂ & ♀ at 2 (Palmer).

L. sulphurifera ♂ & ♀

Wheaton,
Grass,
Horn beetle,
Sand beetle,
all seen.

3rd Sept. 1929. A very hot day, ^(some sun) with thunder at 5 pm.

Upper Glenasmole (Slade Brook), Ill. - as usual.

Bombus agrorum frequent. *B. lucorum* 1 or 2 ♂♂ seen.

Crabro ♀, no doubt *varius*, seen

Mellinus arvensis ♀♀ common

[*Haleitina pygmaea* ♂♂ & ♀♀. *H. calceata* ♂♂ seen at

Slade Brook taken on *Salix cinerea*. ^(*St. ruficornis* 3 ♀♀ taken 1929)
^{Em. on 4/5/30, 11/5/30 & July (?) 1930.}

Pimpla buricoma 3 ♀♀ at Calluna flowers; ^{(also *Tryphonid* found dead on 25.9.30.} with very polished & tuberculate abdomen.

Glypta ♀ at Calluna. *Lissonota commutata*, a small ♂.

Ichneumon cf. *gradarius*? 2 ♂♂.

8th September 1929. A terrifically hot day, no clouds & south breeze (W) at end of very hot fine week.

Glencree, WI, from Knockree to Copse Wood & back along path & river. Not much at except at one oak-tree on N. slope of Knockree ^{near} brook & at Copse Wood.

Bombus agrorum common, ♀♀ mostly, *B. lucorum* some ♂♂. *B. hortorum* 1 ♀ seen. Saw one of *lucorum* come to river & apparently drink by alighting on stone in mid stream & crawling down to water's edge. In returning he fell on his back on water & nearly lost his life, but managed to get out & eventually flew away.

Vespa sp. seen.

Pompilus nigerimus 2 ♀♀ seen.

Crabro varius ♂♂(?) 2 ♀♀ taken (latter night to *palinifer*)

Mellinus arvensis ♀♀ (a few only) seen.

Colletes succinata ♀♀ abundant at searp by river below Copse wood where *And. minutula* ♀ taken on 12.9.29.

Nomada rufipes ♀♀ seen & 1 taken, very common, also ? one ♂ *A. fuscipes* seen.

Halictus rubicundus ♂♂ & ♀♀. *H. calceatus* ♂♂ & ♀♀.

H. albipes ♂. *H. leucopus* ♂.

Sphex laticinctus ♂♂ at same place as *S. ferrugineus*.

One has only two cubital cells in pressing: the other is very large and is *S. ferrugineus* from the C.P.P.

8.9.29 cont. Glencree cont.

No samplings seen!

Pimpla instigator very large ♀ seen on alder; also small ♀.

P. rufata 2 ♂♂ & ♀.

P. brevicornis ♀.

P. oculator ♂♂ & ♀ with red. abd.

P. elegans 1 ♂.

Polyphincta tuberosa, 3 ♀♀.

Colpomeria quadriscripta ♀ ? there.

Henicospilus rufidulus ♀ amongst bracken in Copse Wood.

Proctarchus rufus ♀ at birch. *Ichneumon* or (*gradarius*?).

12th Sept. 1929. A dull windy forenoon & fine afternoon.

Went to Minsack, Co. Westmeath for murex.

Did not collect anything in too cold & windy till afternoon. Then saw some *Bombus lucorum* ♂♂ & *B. agrorum* ♀♀. Also saw ♂♂ & ♀ of *Psithyrus campestris*, some of the ♂♂ being dark & some pale from. Caught one ♂ of each & the ♀ which was pale.

been exposed!

13th Sept. 1929. A very fine sunny day: no clouds.

Perisoreus demersus, 41. 3-30 till 5 pm.

Collected on right bank of river 1/4 mile below the deer park, chiefly on oaks on top of river scarp.

Bombus agrorum a few old failed ♀♀ seen.

Mellinus arvensis ♀♀ seen

Crabro cetratus 2 ♂♂ on oak: the first I have ever seen.

Emphytus scroto with other spp. like *Emphytus scroto* on oak. { *Emphytus scroto* seen 27.9.29 }

Acanthocryptus nigritus ♂.

Pimpla turionellae 2 ♂♂. *P. maculator* ♀. *P. rufata* ♂.

P. elegans ♂ & ♀.

15th Sept. 1929. A fine day, but not much sun & very little out.

Glenree, 41. Copse wood & river banks from old road.

Bombus agrorum, *B. lucorum* ♂♂, *B. hortorum* 1 ♀

Prithyrus campestris ♂♂ of both forms.

Halictus fuscicornis 1 ♀. *H. ~~fuscicornis~~* ♂. *H. punctatissimus* ♂

Mellinus arvensis

15.9.29 cont. Glenree cont.

Pimpla maculator ♀. *P. rufata* ♂. *P. oculator* ♀.

Schizothorax ♀

Camprophora falcator ♀ at oak.

Dyspota praenoxator ♂♂ seen.

27th Sept. 1929. A fine sunny afternoon.

Perisoreus demersus (just below road at deer park gate

& on right bank of river. 4 till 6 pm.

Emphytus scroto 2 ♂♂ flying round big oak in field: other seen! ✓ RCLP. on 13/9/29

Bombus agrorum, old failed ♀♀ still at regressed.

B. (? lucorum) seen on wing.

Vespa vulgaris ♀♀ numerous at oak trees &:

Crabro varius? 1 ♀ on oak.

Pimpla maculator ♀. *P. rufata* 3 ♂♂ & ♀, one ♂ has black & white hind legs.

P. oculator ♂

Arion sp. 3 flying in air.

All iks. taken on oak, high above river!

93.

29th Sept. 1929. A fine day after a wet night,
rather cool & not much hot sun owing to high haze.

Clara^{WI}, oaks on sand flat 1 mile below bridge, as usual.

Bombus agrorum ♀♀ & ♂♂ seen. *B. lucorum* ♀ seen.

Halictus rubicundus & *H. calceolus* 1♂ each seen on Scabiosa

Vespa vulgaris 1♂, ♀♀ (or ? ♂♂) seen. *Lissonota sulphuripes* ♂?

Pimpla rufa ♀ ^(with almost red hind tibiae) *Schizopyga atra* 2 ♂♂ on oak at top of sand flat.

Mesochorus sp. ♂. R.S. by river.

Pezomachus ♀ swept in woods.

Larvae of 3 spp. of sawflies taken on *Salix cinerea* at Garryduff from Road near Stump's Castle, WI.

Pteronidea jennyseni 4♂♂ 1♀, 18.6.30 & over. *Nematus picipennis* 1♀, 19.5.30 & over. *VRCLP* in list dated 17.4.31.
mesoleia found dead in pot at end of season & probably parasitic of *P. jennyseni*.
but could have come from larvae of *brodiaei* sept. from *Psilophanes*, H.D. reared in pot earlier. 1929.

4th October 1929. A showery afternoon, after fine morning.

Porroscourt demesne, 3.30 till 5.30 pm, after heavy shower!

[*Lissonota communis* ♀ taken by George whilst grass in deer park].

Not other species taken in demesne not for above golden field.

but a few on right bank of river a mile below deer park!

94.

6th October 1929. A cold day, with NW gale & showers after very deep depression. From Brunker to Porroscourt deer park gate & walked up old road & spent day in woods between Maulin & Tonduff, Co. WI. Saw beech fern, *Hymenophyllum unilaterale*, *Cystopteris fragilis* & collected larvae for M.B. He intended looking for *Lycophotia alpina* on Maulin but was driven into worry by the gale. ^{Got 2 from Black's valley below for M.B. Kinsella.}

9th October 1929. A fine day, cold, with NW wind, squally, considerable sun in aft.

Porroscourt demesne, above middle lodge, WI. With E. Oth. & Miss Scott, to see place where she believes she took the ♂ *Metocerus paradoxus* in Oct. 1929. A number of ichneumon, Braconids &c. taken, mostly by Othobry. She sweeping:—

Bombus agrorum ♀♀ & *Vespa vulgaris* ♀♀ seen.

Halictus sp. ♂ on fallen ash, like black *H. calceolus*!

T.T.O.

Pomacent demersus, 9.10.29 continued.

collected 8.10.29.

13th October 1929. A very mild day, with S.W. wind.
No real sun at M. Waters after our arrival till 2 pm.
then considerable sun till 3-30.

Valley of Avonmore above the Meeting of the Waters, Avoca, WI.
12-30 till 4 pm. Spent morning above Castle Howard
gate on left bank (just above my bridge) ⁼¹ There caught
black & ick. with white "stern" & Daisy took wingless
Proctotrypid in cage taken out of rucksack. After lunch
walked up right bank & took some small icks. (2 brachids)
by sweeping hazel bushes & track, also 1 ♀ (Tryphonid?)
with longish ovipositor. ⁼² Afterwards crossed to left bank
by 2nd my. bridge & all other icks collected at foot of ⁼³
woods along turnip-field immediately NE of said bridge.
The only aculeates seen were one or two very common
Bombus agrorum & some Vespa (? vulgaris).

13.10.29 cont. Meeting of the Waters cont.

Acrodactyla degener ♀. ? swept off hazel on right bank, by track, ^{at 2.}
Pimpla rufata ^{red hybrid} ♀ taken on thistle at 3

Lampronota marginator ♀ at 3.

Cratichneumon fabricator ? ♂ + ♀.

Large Ch. Hy. lili. (black wing, etc.) ♀ at 3

Lissonota sulphurifera ♀ (?) by railway bridge

Ichneumon ^{black} ♂ at 3 flying over grass.

Pristomerus vulnerator ♀ swept off hazel at 2.

Melichneumon subaenari ♀ at 1

15th Oct. 1929. Aft. A dull gloomy, very hot day.

Too dark to collect!

Devils' Glen, Co. WI. (With MB for thimblets.)

Took several small icks. but all escaped but
one, owing to lack of light to see them in net.

20th Oct. 1929. A fine sunny morning after wet & stormy night turning stormy & cold after lunch. A.S.U.

Walked from Enniskerry to middle Lodge Powerscourt & thence up Glenree river to 2nd "post-stick" & home via Curlewstown & Enniskerry. Some very nice ground for ichs seen along river & some terraces that should yield trees.

25th Oct 1929. A fine afternoon.

Drove to Altidore, WI, with M.B., to get liverworts *Jubula hutchinsonia* & *Dumortiera*, which were found in plenty about the falls by M.B. although not seen there for many years. Met new owner of Altidore (Mr. Flood). ~~None~~ No hymenoptera seen.

27th. Oct. 1929. A glorious day, no wind, very hot sun after a heavy frost (on two successive nights!) & leaves all falling off trees.

Drove Miss Port along course of Liffey from Dublin to Poulaphuca, taking "PH" of water at 16 places. Saw some good hymenoptera ground about Glane, Straffan, above Killeallen (sandy marsh) & below Ballymore Eustace (bee cliff). Took several small ichs N.E. of Straffan, Co. KD. There we had lunch.

30th Oct. 1929. A fine afternoon.

Drove our "Feather Bed" to Glenree, WI, where ascended Maulin - Tonduff corry with M.B. to get more of black lichen (*Rhacodium*) for Miss Knowles. Took also *Ceanogonium* & *Leidea sanguinea*.

3rd Nov. 1929. A glorious day, all sunny, but with very cold strong W to NW wind. A.S.U. Train to Kildare, walked to the Red Hills, then north over Dunmurry Hill to Chair of Kildare, thence over Grange Hill & back to Kildare across edge of Curragh. Myxo. (*Trichia contorta* on felled tree at ^{Dunmurry Hill}).

6th Nov. 1929. A fine day, with cold N.W. wind. Drove Miss Knowles & M.B. to Maulin corry for lichens. Walked over Maulin & explored upper parts of corry, where at 1700 ft took unripe myxo. on liverworts: subsequently proved to be *Lamproderma*.

10th Nov. ~~Nov.~~ A fine sunny day. Between two deep depressions; followed by severe gale. Explored upper part of Deerpark, Powerscourt, WI; especially side valley towards the Long Hill, where on SW side of same found hanging valley with rushy floor which looks good ground for samflies. One hymenopteron brought home in moss from E. side of waterfall.

17th Nov. 1929. With ASU. Walked from Old Bawn up Glenasmole by Coory Brook, round Seearn & back via Butter Mt. Ballymore Hill & Shinnabawnoge. Deep ^{dry} snow above 1500 ft. Fine day.

24th Nov. 1929. From Art O'Meara's & EOM to Athy, stopping to visit Dun Ailinn & for lunch at Mt. Glenduskull, where EOM took 1 small *Proctos* in tea cup; home via Maganay, Ballynass & Hollywood Glen. Fine day.

1st Dec. 1929. With ASU. Walked from Eniskerry to Powerscourt Fall up east-side Valley to Galway, thence to N shoulder of The Down Hill & along E channels of Sugar Loaf to The Ruell & to Bray.

15th Dec. *fungus* 5.

19th Dec. 2. Saw one of *Vespa vulgaris* at my house. It did not see the Old Bawn!

List of Ichneumonids & Braconids sent to
S. A. Roman in Nov. 1929 (ret. Jan. 1930!).

Serial numbers continued from vol. 2, p. 354!

No. 75. *Lissonota* ? n. sp. ♀. Liffey Head, 1700 ft. alt. Co. WI. 7.6.29.
= "*L. magdalenae* Funkh. 1921 (Syn. *L. vernalis* Roman 1924)." A.R.

No. 76. *Lissonota femorata* ♀. Powerscourt Dpt. Co. WI. AMGym.
8.8.1927. = "*L. biguttata* Hgn. (Syn. *L. femorata* Hgn. & probably *L. crassipes* Thun.)." A.R.

No. 77. *Lissonota carbonaria* ♀. At *Salix cinerea*, Beshmabreena
Co. Du. Miff. Scott. 8.5.28.
= *L. carbonaria* Hgn. Carr has taken ^{a ♀} it at Lichfield. A.R.

No. 78. *Lissonota variabilis* ♀. Powerscourt, Co. WI.
10.9.1926. "Correct!" A.R.

No. 79. *Ephialtes tenuiventris* ♂. Clara, Co. WI. 19.5.1929.
"Correct!" A.R.

No. 80. *Ephialtes* (*tenuiventris* ?) ♀ Meeting of the Waters,
Arree, Co. WI. 23.7.1927. = "Species unknown to me.
Possibly *musculus* (Krb.) Hal., but hind tibiae
differently coloured, stigma too." A.R.

No. 81. *Pimpla* (*bernuthi*?) ♂. Clare, C. W. 19.5.1929.
= "*Epiurus inquisitor* Sesp. ♂." A.R.

No. 82. *Glypta* (? *nigricornis* var.) ♀. Portrane, Co. Du.
31.8.1928. "Probably correct." A.R.

No. 83. *Glypta* (? *pictipes*) ♀. Campher, Co. WA.
14.8.1928. = "*G. pictipes varicornis* Thun." A.R.

No. 84. *Glypta* (? *trivittatus*) ♀. Upper Glenasmole,
Co. Du. 16.6.1929. = "Suits the short diagnosis
but has the clypeus with long pubescence!
Can't place it!" A.R.

No. 85. *Glypta* sp.? ♀. Glenageary, C. W. 29.8.28.
"Same sp. as No. 84." A.R.

No. 86. *Ephialtes* sp.? ♀. Dartmoor, Devon.
R. C. L. Perkins. July 1929.
= "*E. mesocentrus* Gr., small specimen." A.R.

No. 87. *Microctonus xanthocephalus* Marshall? ♀
= "*M. sp. testaceus* Cress. sec. Thoms., but propodeum without
a well limited area petiolaris." A.R.

No. 88. *Chorebus lymphatus* Hal.? fide G. T. Lyle.
"Impossible to determine this carded specimen with
Thoms. I cannot even see if it is a *Chorebus*." A.R.

Notes on above by G. W. S.

No. 81. Is a large ♂ *P. inquisitor* undoubtedly! Agrees well
with a ♂ in Brauns coll. but larger. Nervellus is
intercepted just above the centre in ♂ (+ Brauns' ♂) & so
I ran it down as *P. bernuthi*!

No. 82. Then 3♀♀ of this form from Portrane. They
are smaller than Wicklow *G. nigricornis* & have much
longer terebra, otherwise similar.

No. 83. Will not agree with *varicornis* from Wicklow.

Nos. 84 & 85. I would be slow to agree that these
were the same species! Though both undoubtedly
have long pubescence on clypeus as Roman says.

A. W. S. 14.1.30

Another batch (*Lissonotids* & *Banchids*) sent to S. Roman
in Feb. 1930 & returned with postcard dated 3.3.1930.

No. 89 & 90. *Lissonota parallela* ♂ & ♀. Brittas Bay, W. 7.8.1929.
Apparently correct as Roman made no comment!

No. 91. *L. virgata* or *nitida*? ♀ Cahore, WX. 15.7.1929.

"To judge from the description both ought to be the same species, but I have nothing of this short-tailed species" A.R.

No. 92. *L. sp.*? ♀. might be a freak of *bellator* but unlike any other specimen I have seen.

"might be a var. of *carbonaria* Hgn., but I am not quite sure the abd. is normal." A.R.

Nos. 93 & 94. *L. dorsosa* ♀ & ♂. Deputy's Pass, WI. 19.7 & 24.7.1929.

"I think they are *L. palpalis* Thun., though never having seen the species before, I may be mistaken. *palpalis* ♂ is undescribed!" A.R. See further note at bottom of p. 106.

No. 95. *L. sp.*? ♀ (cf. *L. varicosa*). Clons, UX. 17.7.1928.

No. 96. *L. sp.*? ♀ (cf. *L. humerella*). Rathdrum, WI. 8.7.1926.

"95 & 96 are the same species, *L. buccator* Thunb. The 1st abd. l. segment is somewhat different in both, but this is accidental, I have seen it before in *L. carbonaria* & *melanaria*, these are also the same species." A.R.

No. 97. *L. sp.*? ♀. Upper Liffey, WI. 2.9.1927.

"*L. buccator* Thunb., too!" A.R.

No. 98. *L. sp.*? ♂. Glen of Linnal, WI. 31.7.1927.

"A melanistic ♂ of *L. errabunda* Hgn. (compared with types!" A.R.

No. 99 & 100. *L. errabunda* ♂ & ♀. Rathdrum, WI. 8.7.1927.

"99 is *L. errabunda* like 98. No. 100 may be *errabunda*, but if so it is very melanistic & smaller than the ♀ type." A.R.

No. 101. *L. errabunda* (?) ♀. Sand dunes, Brittas Bay, WI. 7.8.1929.

"Same as No. 100, but has yellow points on vertex, hind trochanters red!" A.R.

No. 102. *L. sp.*? ♀. (? *L. dubia*). Ballyhenry, WI. 29.8.1926.

"Not *dubia* tho has a terebra longer than the whole body (not rare on spruce here!). Very near a n. sp. I have from S. Sweden & from Germany, *Argyresthia*." A.R.

No. 103. *L. sp.*? ♀. (cf. *L. transversa*). Lucan, DU. 5.8.1923.

"This ♀ has very strongly punctured abdomen (seg. 2 & 3!) = *L. buccator* Thun. ♀." A.R.

No. 104. *L. sp.*? ♀. (cf. No. 103). Lucan, DU. 5.8.1923.

Abdomen less strongly punctured! but with the same kind of sculpture! = *L. buccator*, with rudimentary ventral dots." A.R.

No. 105. *L. sp.*? ♀. (cf. Nos. 15 & 16). Drumgoff, WI. 29.7.1929.

"Same as No. 104. It is remarkable that none of the present specimens have the two red facial stripes not rare in Sweden & used as a character for *varicosa* Thunb." A.R.

No. 106. *L. sp.*? ♀, with short terebra. ? bred from pine cones brought home from Poverocourt, WI. 21.8.1927.

"Is *L. caliciformis* Gr., dark var." A.R.

caliciformis

No. 107. *L. clypealis* ♀. Clara, WI. 29.7.1929.

"Correct." A. Rm.

No. 108. *L. sp.* ♀. Clonregal, CW. 9.8.1929.

"*L. ? punctiventris* Th. Have no material for comparison at hand." A. Rm.

No. 109. *L. sp.* ? Very small ♀. Sand dunes, Portrane Du. 31.8.1928.

"Unknown to me. Antennae broken, due to the short needles." A. Rm.

No. 110. *L. sp.* ♂. Taken with No. 109. Looks like a small

L. sp. *L. errabunda* ? "Sculpture of abdomen

much smoother than in *errabunda*. May belong to 109." A. Rm.

No. 111. *L. sp.* ♂, with elongate abd. segments.

Meeting of the water, WI. 23.7.1927.

"May be a small & dark *L. clypeator* Gr. (= *constricta* Hgn.).

No. 112. *Ectaster* sp. ? ♀. (? var. of *E. guttatorius* with black ventillum). Kildavin, CW. 9.8.1928.

"*E. illuxor* Grav. ♀, var. *pedibus nigris*. Antennae thinner than in *adpressus* Thunb." A. Rm.

No. 113. *E. fornicator* ♀. Mt. Butler, NT. 17.8.1927. P.A.P.

"Correct."

No. 114. *Banchus pictus* ♂. Meeting of the water, WI. 25.13.1928.

"Is *B. crepeldensis* Ulbr. ♂. The northernmost locality known. A. Seyrig has described the ♀." A. Rm.

See note at bottom of p. 106 (opposite) →

No. 115. *B. volutatorius* ♂. Cahore, WX. 21.7.1929.

"Correct." A. Rm.

No. 116. *B. moniliatus* ♀. Ballymole, WA. 27.7.1928.

"Is ♀ of *B. volutatorius* L." A. Rm.

No. 117. *B. sp.* ? (? *compressus*). Bovercourt, WI. 19.6.1925.

"Is *B. femoralis* Th. ♂." A. Rm.

D. Roman's postcard, dated 3.3.1930 reads as follows:—

"Two of your species outshine the others to my eye, viz. *Lins. palpalis* Th. ♂ & ♀ & *Banchus crepeldensis* Ulbr, especially the *Banchus*.

It was described from the Lower Rhine valley (♂), then I got a ♂ among Hungarian material from the Danube island Crepel; next Mr. Seyrig found ♂ & ♀ in Spain & now you send me Irish ♂.

It seems to be an exclusive spring species & belongs next to *B. moniliatus* Grav., though much richer coloured. *B. fenestrator* Th. is known on the continent as a parasite of *Pandora griseoviridis*. *Limonata luccator* Tatz. seems to be no rare species in Ireland.

I have always found it on tree trunks, principally *Salix fragilis* (cultivated). I scarcely think you have *L. dubia* Hgn., because in my experience it is invariably connected with spruce."

D. Roman p.c. dated 22/3/30 says that another pair of *Limonata* from Deputy, Pass, 19.7.29 & 4 ♀ from Clonregal, 9.8.29 are all *depressor* & the former not *palpalis*. Cf. his note on Nos. 93 & 94, p. 103 ante.

He also says that max. palps of ♂ *Banchus crepeldensis* are like those of *B. moniliatus* & no other sp.

♂ 5th ant. ♂ 4th ant.

♀ 5th ant. ♀ 4th ant.

} species of his sketch! [cont. Vol. 4] p. 93.

7th April 1930. Afternoon. A fine sunny day with cold wind (N.).

North side of Gargle Glen at upper end, Co. WI.

Bombus lucorum a few ♀♀ seen.

Vespa ♀ seen, looked like *rylandi* but?

I spent an hour in the oak-woods on the chance of getting *Cryptopimpla anomala* but not as yet seen; in fact the only hymenopteron seen was one ♀ (?)

Cynipid nest of *Vaccinium* & under oak.

N. of the oak wood I saw 1 ♂ *Andrena* at willow which looked small & grey like *G. praecox*, but?

10th April 1930. Afternoon. A fine day, with small clouds, much sun, but cold N. wind up valley.

Bohemna brevis⁽¹⁾ & *Glenasmole*, to side along lower reservoir⁽²⁾. Co. DU.

Willow Warblers, Bluff Chaff, very abundant. Sand Martin by the Dodder above Old Barn.

Bombus lucorum, *B. terrestris*, & *B. jonellus* ♀♀ seen.

Andrena clarkella ♂ very fresh & ♀♀ at 2.

A. pygmaea ♂♂ & 1 fresh ♀ at 2.

Halictus pygmaeus 1 ♂ ^{abnormal specimen} on dandelion at 1. R.C.P.

Homada leucopthalma 2 large ♀♀, 1 small ♀ at banks at 2 with *A. clarkella*.

Amasonia viduata ♂ R.C.P. at willow at 2.
Theridion 1 ♂, 3 ♀♀ at willow catkins at 2.

ARKLOW (EASTER) TRIP: 1930.

17th April 1930. From Arklow in afternoon.

A fine day with almost a gale from N. after very hard weather. Everything very backward.

Stopped at Ballyhenry quarry, WI, but little seen & only 1 ♀ *Andrena clarkella* & 1 *Bombus lucorum* seen.

18th April 1930. A fine day with much sun in morning, but some cold strong N. wind.

Walked by road half way to Enniscorthy, VI. & home by coast. Morning!

Bombus lucorum numerous ♀♀ at willows.

Prithyrus barbatellus 1 ♀ on dandelion along coast.

Apis mellifera nest in ash tree along road N. of Webb's River first seen ca. 1926 still in full swing & ♀♀ visiting willows & hard mounds along edge of marsh below road.

Andrena albicans 1 ♂ on willows by road.

A. nigrescens ♂♂ common & very fresh along coast.

Halicta rubicundus 1 ♀, *H. villorum* 1 ♀

H. (?) nitidiusculus ♀ on daisies & dandelions along coast.

18th April 1930, afternoon. Only birds of run.

Drove past waterworks (park) & back gate of Glenart Castle, then southwards through Johnstown across Wexford boundary to glen of ^{Johnstown}, where my good maps grand full of birch, willow & alder; also oak woods. Saw here

Bombus terrestris 1 ♀. B. lucorum ♀♀, many

In Glenart woods at back gate near Holly under oak & my nice ground: saw Bombus jonellus & B. lucorum here. No sign of icks although some L.A. run.

Stitchwort & Wood Sorrel well out at latter place.

19th April 1930. Much sun till 4 p.m., but Northerly gale all day & very cold except in shelter. Dull, with slight showers after 5 o'clock.

11-30 till 3-30. Woods & sand flat below Clara Bridge, WI, as usual.

19.4.30. Clara: oak woods & sand flat, cont.

Bombus lucorum a few ♀♀, B. jonellus 1 ♀, seen.

Andrena lapponica ♂♂ abundant, several very fresh ♀♀, though Vaccinium very late & hardly out.

[No Halicti seen in sand flat!]

4 ♂♂ of Anomalid & 1 ♂ Campoplegid in woods, all former of Vaccinium, latter at Holly, 1 remunda.

Sawfly (black) ♂ in wood below sand flat = ^{Lygaenotus} mollis ♂ V.R.C.P.
^{Amphiteles} amatorius ♀ taken by track near upper end of sand-flat.

Another ♀ ick seen at-gorse, but missed.

Holly Blue, 1 ♀, in woods.

Swallows seen several times by M.D.S. & boys.

4 till 5 p.m. Woods below Castle Howard at meeting of the Waters, Antrim. WI.

Bombus lucorum 1 ♀ seen.

Andrena lapponica several ♂♂.

No icks seen though L.A. run & sheltered.

20th April 1930 (Easter Sunday).

Fale from N. continues, after a very bad night with sleet & snow: very cold: considerable run in afternoon.

Gorteen valley, S. of Coolgreany, Co. WX.

2.30-4.30 pm. Sheltered & plenty of run, but willows only out here & there & nothing seen but a few Bombi.

Very good ground for sampling a few weeks later in year!

Bombus lucorum ♀♀. *B. agrorum* 1♀

very fast run on ♀ willow.

Cowdrip out along roadside behind Glenart, WI.

21st April 1930 (Easter Monday).

Storm gone at last! Much warmer, little or no wind: considerable run after 2 pm.

Sandhills S. of Cahore Pt., Co. WX.

1.30-4-30 pm.

Bombus lucorum, *B. terrestris* (1), *B. jonellus* (2)

B. agrorum 1♀ at Glickona, *B. hortorum* 1♀ at Primrose, others seen.

Andrena albicans ♂♂ at willow.

Apis mellifera ♀♀ at willow.

Sample ♀ in sand in big hollow = *Empyrides pallipes*
✓ D.P.C. & P.

22nd April 1930. A fine day, warm & with considerable sun, though clouds persistently hang over sun during mid day.

Kilcarrig Bridge, Co. CW. & glen of the Glashanagh as before.

Myrmica ruginodis ♀♀ by the path as usual.

Bombus lucorum a few ♀♀ + 1♂ at willow

B. hortorum ♀. *B. agrorum* ♀♀.

B. distinguendus 1♀ in marsh, below a willow.

Andrena rosae ♀♀ abundant, only 2♂♂ seen.

A. praeusta ♂♂ + many ♀♀, latter very fresh

A. nigrescens ♂♂ only. *A. albicans* ♂♂ only.

A. pygmaea several ♀♀.

A. minutula 1♂, 2♀♀, one on willow, 1 on daisy.

Halictus rubicundus ♀, & a small ♀ seen.

Homalictus bifidus ♂.

Salix fusca ♂, on ditch of upper road.

Pimpla maculator ♀ on willow.

Sp.? like *Linnaea cathartica* ♀ seen on tall willow.

Plenty of larvae of *M. auraria* in marsh - took

larva of ♂ at base ^{with ant.} under bark of third tree

where *Linnaea fuliginosa* is usual.

Greenveins white & or orange tip seen along with from Gort, & former also at Kilcarrig.

22/4/30 cont. Afternoon 3 4 till 4.30 pm.

Sund pit below Kildare Bridge, G.C.W.

Nothing seen in way of bees but a very few
Bombi, probably all *B. lucorum*; also *Pyromela*
schrencki, *Lesius niger* + *L. flavus*. Plenty of
Platygaster *hypocrenae* in nest of last 2 sp.

Saw, but failed to catch, wingless ♀ *Phygadeuon*
exactly there one taken on 9.8.29.

23rd April 1930. Dull all day + misty rain from
11 AM onwards.

Walked over Arklow Head to Arkintony
+ back across S. Strand. Saw one ♀ *Prithyrus*
distinctus on head + 1 ♀ *And. gurgana* at
Arkintony.

24th April 1930. Bump, wet + foggy, but very
warm, all day.

In afternoon drove to meeting of the Waters,
+ walked up right bank of river to 3rd
my. bridge across same. Took one ♀ *Brachist*
in a barrel bush. =

Very good ground for later in year! { Tried July 1930 but too
much overgrown after leaves
come on trees! A.V.S.

25th April 1930. Still damp + foggy, + drizzled
from 3 pm onwards.

Drove to Glara, about noon, + stayed till
rain came in. Warm + sheltered, but no sun.

Bombus lucorum + *jonellus* ♀♀ at Vaccinium
And. albicans not seen at willows.

A. lapponicus not in woods, no ♀ seen!

A. pratorum 1 fresh ♀ taken on path through
wood where *A. lapponicus* nest.

Salix fusca or seen at same place.

Ants: *Lesius flavus* + *L. niger* very busy at
sand flat throwing up sand mounds.

One small ich. caught + lost by path in woods.

One small ♀ of ~~*Brachist*~~ taken on
Vaccinium behind Ormonde glade: - (See R.C.L.P. in
alt. dated 17.4.31)
= "*Contania collectanea* (or *Ameletus* sp. near *riduatus* *riduatus* var. sp.)"

26th April 1930. A glorious day, with very hot
sun after a dull early morning. Drove home!

Devil's Glen, WI. 12 noon till 3.30 pm. Very little
out at first, indeed things only just coming
out (? hatching out!) about 3 pm.

Bombus lucorum ♀♀. *B. jonellus* 2 ♀♀ seen both on
Dandelion flowers. *Prithyrus distinctus* 2 ♀♀.

26/4/30 cont. Devil's Glen, W.I. cont.

Andrena albicans ♂♂ seen at willows below fall.

A. pygmaea several ♀♀ seen.

A. subopaca, a perfectly fresh ♀

~~*A. subopaca*~~ taken on flower of Wood Sorrel!!

Nomada fabriciana seen on dandelion.

Thrinax ♂ 1/2 mile above foot of glen, by road.

all = E. tridens fide R.C.L.P.

Eupria spp. ♂♂ + ♀♀ at various places between road & stream in glen: mostly on or about brambles.

Pimpla inquisitor ♂? 1/2 mile above foot of glen.

Goldilocks out all way up glen: also Bluebell.

[Garlic out at Newton mount Kennedy!]

Speckled Wood (1) taken by Hugh at foot of glen.

Holly Blue, abundant.

[Jack-by-the-hedge out at Enniskerry!]

END OF ARKLOW TRIP.

27/4/30. *Blennocampa subcana* ^{R.C.L.P.} taken at L. Dan, Co. WI.
by A.A. Lisney (i.e. between L. Dan & L. Tang).

27th April 1930. A warm dull day till 3pm., then cold & foggy with E. wind.

Glencree river, just above where it enters Povermount, Co. WI. (left bank).

Bombus lucorum, *terrestris*, & *agrorum* ♀♀.

B. lapidarius 1 ♀. First seen 1930.

Andrena albicans ♂♂ abundant.

A. jactans ♂♂ flying over gorge. 1st 1930.

A. apicata 1 ♂ ♀, by side of glen. *A. pygmaea* ♀♀

Nomada fabriciana 1 ♀ on clay bank by side of glen.

Salix fusca ♀.

Dolerus areolaris 1 ♂ swept in marshy meadow: 1st 1930.

Sagaritis in wood: the only ich. seen all day.

1st May 1930. The third perfect day in succession!

3-30 till 5pm. Marsh in floor of The Dingle, Co. DU.
with A.A. Lisney.

Dolerus biogaster 2 ♀♀ on rushes just S. of wall across marsh, where AAL took 1 ♀ on 21st April 1929. (AAL.)

D. migratorius 2 ♂♂. *D. areolaris* 2 ♀♀.

Also saw *Andrena albicans* ♂♂ + ♀♀, *A. jactans* ♂♂.

A. lapponica 1 fresh ♀ on *Vaccinium*. *Nomada ruficornis* ♂ + various *Bombi* in distance.

Cuckoo seen & heard! [Large White seen in Limerick Rd. DU.]

4th May 1930. A dull morning, turning fine, but 15 minutes after reaching Clara a rain formed & it rained hard, though the sky to east & also to west. Left Clara at 2 pm & made over Wicklow Gap, down Kings River Valley to Hollywood & Mergestown Glen, where there was considerable sun, but strong breeze.

12-0 to 12-30 noon. Marsh N.W. of Garrydaff Cross Roads, S. of Rathdrum, WI.

Dolerus nigratus ♂♂

Dolerus aeneus ♀.

D. madidus ♂ (E.O'Mahony!)

D. biogaster ♀ in rush patch close to road, N. of cross roads, S. of bridge (E.O'Mahony).

12-45 till 2 pm. Clara, WI.

A few bees seen in wood before rain.

Pimpla calobata ♀ taken by Hugh on sand-flat under Scots Fir, on a piece of egg-shell!

4.5.30 cont.

Marsh at head of Mergestown Glen, near Hollywood, Co. WI.

Dolerus oblongus ♂?

D. madidus ♂ & also a ♀ seen in rushes.

Many Comenches heard!

5.5.30. Swifts seen in evening at Mayfield, Harold's Cross. Extraordinarily late in evening!

8th May 1930, late afternoon. Sunny & cold. Glen of the Dovers, WI.

Sphex sp. ♀ & Nomada maculosa in old sand pit above Delany road. Arum in flower.

11th May 1930. A hopeless day with rain in afternoon in approach of depression. Ballymore Eustace, Co. KD.

Andrena sericea ♀, very fresh, on dandelion (Palmer), near sand-cliff by the liffey, where we arrived just as the rain commenced.

Common Bogle in flower.

15th May 1930. Mostly dull & windy in aft.

The Dingle, Co. DU. for Dolerus biogaster but none seen.

D. aeneus? ♂, the only one seen. Germander Speedwell out!

2 spp. icks! -

18th May 1930. A stormy day, after a deep depression
& severe gale & rain the previous day! Much sun!

10.30 - 11 AM. Marsh between roads at Enniskerry W.

Dolerus migratus ♂

Empria sp. ♀ "probably *liturata*" like R.C.P., on Marsh Marigold.

2 other *Dolerus*

11.30 - 12 noon. Ballyhenry quarry, Co. WI. Sunny.

Andrena jacoti ♂♂.

Homada pordensis ♂ & ♀.

Some ich. & braconids.

12.30 till 4 pm. Clara, Co. WI. Sunny, very windy
& several showers. Almost all taken in oak
woods behind sand flat (1) & in *Osmunda*
glade (2). A few species taken near Bridge &
Dolerus niger ♂♂ taken above Bridge by M.D.S. (3).

No bees seen on sand-flat: too windy!

Homada bipida seen in woods.

Dolerus aeneus ♂ & ♀ in woods.

Portania leucopis ♂ & ♀ on Birch at 2 (antennae infrequently broken! AWS).

NB. Some taken this day at Clara are
erroneously dated 23.5.30! AWS.

18.5.30 cont. Clara cont.

Pimpla tenebrosa ♂. *P. inquisitor* ♂♂ common amongst

Vaccinium & on young oaks just in leaf: for ♀ see below.

P. inquisitor small ♀: swept off *Vaccinium* not far below bridge.

P. rufata (S.S.) ♂.

Chorebus ♂♂ & ♀♀ = 41 probably, & ♂♂ *Stilpnus* not required till 23.5.30!

Phytodietus *guineensis* ♂? ♂♂ & ♀♀ about 1000.

21/5/30. *Empria longicornis* ♂ taken at Ennistymon, Co. CL. by P.A. Phillips.

23rd May 1930, afternoon. A fine day, with hot sun
& cool E. breeze at end of a fine week.

Glenasmole, Co. DU. East side of lower reservoir, under
otherwise stated: almost all taken in first big
cumb.

Bombus jonellus (1), *lucorum* & *agrorum* ♀♀ seen, no ♂♂.

Andrena subopaca ♂ on Bellis.

Vespa vulgaris & *rufa* ♀♀ seen.

Dolerus gemmeri ♂♂ abundant, a few ♀♀.

D. trimaculatus 1 ♂ in cumb; 1 ♀ in "dubious" marsh
below dam, by road. T.T.O.

23.5.30. Glensmole cont.

Dolerus haematodes ♀ *D. niger* (?) small ♂*Loderus vestigiatus* ♂♂ abundant; a few ♀♀.*Rhyogaster anapornae* ♀ ^{✓ RCLP.} amongst nettles &c. below dam.*Empria* sp.? ♂ ^{✓ R.C.L.P.} fide R.C.L.P.*Pimpla turionellae* ♂ ^{✓ RCLP.}*Spherotheca vespum* ♀ ~~XXXX~~*Chrysis* sp.? 1 ♀ of *Chrysis* Hal. 1845. 29. 1845.

18. Some of the specimens taken at Glara on 18th inst. 23.5.30. labelled by error! by A.W.S.

25th May 1930. A glorious day, much sun & soft.

Upper Glensmole & Slade Brook, Co. DU.

(by upper Glensmole moraine)

12 noon till 5 pm. With Palmer!

Bombus lucorum, *hortorum* (1), *distingendus* (1 Palmer),*agrorum*, *muscorum* (rare), *derhemellus* (common)*pinellus* (1 on willow at 2). ♀♀ only*Prithyrus distinctus* ♀♀*Andrena albicans* ♂♂ & ♀♀, *A. clarkella* var. ♀♀ at 1.*A. praeox* ♀♀ at 2. *A. lapponica* ♀ (Palmer) at 2.*A. fucata* 1 ♂, 1 ♀ just out at 2. *A. cineraria* ♂♂ & ♀♀ just out at 1, ♂♂ below 2. *A. vilkella* ♂♂ at 1 & 2.*A. sandusella* ♂♂? *A. subopaca**A. jacobae* ♂♂ & ♀♀, Palmer found many ♀♀ at 2 going into one spot in bank.

25.5.30 cont. up Glensmole & Slade Brook! 124.

Halictus calceatus ^{at 1 & 2} *albipes* 1 at 1, *freysenianus* 1 at 2,*H. leucopus* 1 at 2*Nomada marshamella* common. *N. ruficornis* 1 large fresh ♀ at 2 (Palmer).*Salix fusca* large ♀ at 1 (Palmer).*Dolerus* ^{haematodes ♂♂?} ~~haematodes~~ ♂♂*D. princeps* ♀ at 1*Allantus cinctus* ♂ at 1 (Palmer). *Empria immersa* ^{✓ RCLP.} ♂ at 2*Tenthredella atra* ♀ at 1. *Strongylogaster lineatus* ♀♀ at 1.*Pontania* sp.? ♂ ^{✓ RCLP.}*Amauronotus fallax* ♀ ^{✓ RCLP.} at willow at 2, rt. bank just

below "gorge"!

A. cameroni ^{✓ RCLP. Benson agrees! 1934. 10. 6. in March 1936!} ♂ at 2 with last.*Blechnocampa tenuicornis* ♀ (✓ RCLP) at same place.*Empria immersa* ♂. *Empria* sp. ♂ "one of the dubious forms referred to literature as some of the *undulata* group" R.C.L.P. ^{lit.} 17.4.31.*Ichneumon luekeni*? ♀ at 1.*Cryptopimpla anomala*? Two ♂♂ at 2 which seem identical with those from the Gold Mines Valley.*Pimpla detrita*? ♂ at 2 (?). *P. instigator* ♂ at 1.

29th May 1930. A fine sunny afternoon after
a dull midday, cool E. breeze.
Kilmallin Glen, E. of Newtown Mt. Kennedy, Co. WI.
3.15 till 5 pm.

Bombus lucorum, *terrestris*, *agrorum* & *lapidarius* ♀♀
Andrena albicans ♀♀ gathering pollen on ♂ oak
catkins, also at Hawthorn, holly, &c.
A. pistis ♂♂ & ♀♀, *A. jacata* ♀, *A. saundersella* ♂♂ & ♀♀
common at pigwidgeon under bracken.

No *Halicti* seen!

Nomada marshmella common. *N. tipida* 1 ♀.

Euclyptus myrtaceus 1 ♂ on Hawthorn.

Myrmica spinosus ♂♂ common on one Hawthorn bush near
Athalia lineolata? ♀ only rarely seen

Pimpla humilis 1 ♂, with red & black hind legs.

P. detrita 1 ♀, *P. similis* (?) 1 ♀ like last but with longer terebra!

Mesochorus sp. ♂.

Cataglyphis sp. ♂.

Common blue
seen

1st June 1930. A dull day, cool in Dublin, very
hot in Barrow valley below Athy, very little
sun all day & never clear sun! Passed through
Leamy river between Kilmallin & the moat of
Ardskull, on way to Athy.

11.30 till 12.30. Old sand-pit by the Maganay road
1/2 mile S. of Athy, ~~W.D.~~ Co. KD. [S. Athy (D)]

Bombus agrorum ♀♀. No other sp. seen!

Andrena wilkella ♂♂ common. *A. albicans* ♀♀ on Hawthorn

A. jacata ♂♂ seen.

Halictus rubicundus enormous numbers on scarp & in
flat ~~grass~~ ground in pit. *H. calceolus* ♀.

H. albipes, *villorum*, *nitidiusculus*, *tumulus* 1 ♀ each taken.

No sp. of *Sphex* seen, though I have seen none
Halicti so abundant!

Crabro palmipes ♂♂ & one ♀ *Verpa* sp.? seen.

Tenthredopsis ♂♂ abundant!

Tenthredo arenata ♂♂ & 1 ♀ seen. 1st 1930.

Tenthredella temula ♂ at Hawthorn.

Loderus vestigiatus 1 ♂

Loderus migratus ♂

Well
hathly seen.

1st June 1930. cont.

12-30 till 1-30. Marsh between road & canal
just S. of Ardreich mill & Ho. Very good pond
but not enough sun. ~~W. K. D.~~ Co. K.D. [S. Athy (2)]

Bee Hawk mth taken at flower of many antlers
M. aurinia flying over marsh.

Sedge Warbler heard for 1st time 1930.

Bombus muscorum ♀♀ frequent.

Selandria cerra ^{✓ RCLP} ♂♂ & ♀♀

Tom. laticinctus ♀ seen.

Dolerus 1 seen amongst rocks.

Stellaria palustris
seen in
marsh drain
(not in flower)

also *Selandria flavus* 1 ♂
✓ RCLP.

1-30 - 2-30. Overgrown sand pit on east side of
road at same place, ~~W. K. D.~~ Co. K.D. [S. Athy (3)]

Prithium laticinctus ♀.

Bombus lapidarius ♀ reported by George. *B. hortorum*

B. myratorum a beautiful pair ♀ on red-clover.

Andrena wilkella ♂♂. *Monada barhamella* ♂

Halictus laticinctus ♂♂ common in red clover & *Veronica chamaedrys*

& other spp. seen, probably *calceatus* & *tumulus*

Gorytes mystaceus 1 fresh ♀.

Tenthredo arenata. *Tenthredella tomula* ♂♂ at Hawthorn

Tenthredopsis ♂♂ abundant. *Phryganea grandis* ♂.

1-5-30 cont. sand-pit S. of Ardreich mill cont.

~~The~~ *Tryphon* ^{Polyblastus} ~~putipes~~ ♀. ♂♂ & ♀♀ common amongst grass

Tankardston Bridge, R. Barrow, N. of Maganay
Co. ~~W. K. D.~~ Co. K.D. & river edge & plantation at N.E. corner
of same. [S. Athy (4)]

Pemphredon laticinctus ♂

Thalictum
flavum common.

Transtella rhipipia ^{*Selandria morio* ✓ RCLP} ♂

Eupis ? ♀. ^{See RCLP note of 17.4.31.}

Calocera cethipis ♂ ✓ RCLP.

all in team of
Vesperugo palus
flew bridge.

Brimstone Butterfly ♀ seen by Hugh & myself
E. of bridge.

Many spp. of *Halicti* resting at S.E. end of
bridge on roadside.

Pimpla rufipes ? large ♂

Proctos. incidens ? ♀. *Hemiteles pulcher* ? ♂ dark var.

3-0 till 4-0 pm. Bank of Canal just N. of
Maganay, ~~W. K. D.~~ Co. K.D.

Dolerus palustris 1 ♂, 3 ♀♀

Andrena albicans & *jacobae* ♀♀ on Hawthorn.

pleura yellow etc = luteus. (about halfway between
luteus & fuscipennis
on characters)

4, THURLESTONE ROAD,

NEWTON ABBOT,

DEVON.

17/⁴/~~3~~/31.

- Amaur. viduatus ♂. Hal. fratellus ♀ ab. Blenn. subcana Poecilost. longicornis ♂ ✓
- Rhag. aeneiferae Poecil. ? m ♂. Lygaea mollis ♂. Blackish wings of ^{new} fuscipennis ✓
but might not to have pale pleura!
- Pt. ferrugineus ♂ Pt. ferrugineus ♂ Emphytus pallipes Try Pontania clectanea ✓
(in Amaur. sp. near
viduatus or viduatus var. ✓
- Poecil. tridens 4 ✓
- Poecil tridens 4 ✓
- Poecil. tridens 2 ♂. A. camerone ♀ dark var? or vittatus? saw not visible Pt. ribesii ✓
- P. ribesii 2 ♀ saw should be examined, Pt. ferrugineus ♂, Blennocampa tenuicornis ✓
- Am. fallax A. camerone ♂ Poecil. immersa ♂ Malloph. liturata ♀ ✓
- Pont. leucopsis ♀ Emphytus cinctus ♀ Poecil. ♂ one of the ✓
~~Emphytus~~ dubious form referable
to either liturata or some
of the undulata group.
- Pontania sp ♂ ✓
- Poecil. sp. antennae of
longicornis group, subtrifidant:
cylindric like liturata rather. ✓
- Callosa aethiops. Selandric morio. Cladius difformis ♀ ✓
- Priophorus pad. ♀ bad. Selandric flavus. S. sericea, Thunbergia maculata / abnormal ✓
♀ neuration
- Sel. stramineipes. Dineura virens, Pt. myrothidis, Dineura testaceipes ✓
- Pristiphora ruficornis Dineura testaceipes var. Sph. hyalinatus large Sph. ferrug ♂ ✓
Emphytus pallipes
- 2 D. nitens ?? not metallic enough & reaction not typical ✓

St. angustatus ♀, N^o Galway R.A.P.
Prithphora pallidiventer ♀, Ballyhenry 17.7.30.
Trich. cradictus ♀ Deputy's Pass.

Pt. ferruginea, Templemore, R.A.P. 2.7.30.

Sel. morio, Rathdown, 26.7.30.

Fenusa debens ♀♀, Rathdown & Limerick.

Amastus *agrimus*, Kilsenny 18.8.30.

or near *Deut. fl.* } - Rathdown 26.7.30.
Pteronidea

Pteronidea *dispar* ♂ *clara* 11.8.30.

Sel. morio ♀, Limerick, 12.8.30.

Prithphora pallidiventer, yellow form ♂
Phoenix Park, 19.8.30.

Sphecodes *lystivator* ♂ Deputy's Pass

Am. (vittatus, camerani or sp.?) ♂ & 2 ♀♀

Irish, Rathdown.

Am. camerani *fid.* R.A.P. 3000 ft. Dartmoor.

RECEIVED
1930 SEP 10

RECEIVED
1930 SEP 10

RECEIVED
1930 SEP 10

1930 samples: see R.C.L.P.

Pontania leucopis ♀ On birch, Clara, WI. 18/5/30.

Empria longicornis ♂. Ennistymon, Co. CL. R.A. Phillip. 21/5/30.

Empria sp.? ♂. Glencasmole, DU. 23/5/30.

Pontania sp. ♂ Upper Glencasmole, DU. 25/5/30.

Empria immensa ♂. Slade Brook, Glencasmole, DU. 25.5.30.

Amanonematus fallax ♀. On salix, " " " " " "

A. cameroni ♂ " " " " " "

Blennocampa tenuicornis ♀ " " " " " "

Empria sp. ♂ "one of the dubious forms referable to liturata
or some of the undulata group." " " " " " "

Those listed below were named by R.C.L.P. when I stayed at
Newton Abbott in April 1931 & consequently there is no letter
relating to them from him.

[Pteronidea segmentaria, ♂. W. Galway, W.G. R.A. Phillip 1.9.29
previously named sp.? by R.C.L.P.]

Pristiphora pallidiventris Hack ♀. Ballyhenry, WI. 17.7.30.

Trichiocampus radiatus ♀ on Eucrymum, Deputy's Pass, WI. 15.7.30.

Pteronidea ferruginea ♂. Templemore, N.T. R.A.P. 2.7.30.

Selandria morio ♀. Rathdrum, WI. 26.7.30.

Fenusa dohrni ♀♀, on Alder, " " " "

" " ♀♀, " " , Enniscilly, WI. 27.7.30.

Ametastegia equiseti ♂. Kileavy, CW. 16.8.30.

Pteronidea sp. (near n.sp. of Denis' group). ♂ Rathdrum^{WI.} 26.7.30.

" dispar ♂ Clara, WI. 11.8.30.

1930 samples cont.

(3)

Selandria morio ♀. Limerick, WI. 12-8-30.

Pristiphora pallidiventrata, orange form of ♀ (? n. sp. says R.C.O.)

Phoenix Park, DU. 19-8-30.

Ameuroneura ♂ & 2♀♀ of same series as that on p. 1.

Dr. Perkins said these were either vittatus, or cameroni var.

or another species near there! He also gave me 3 ♂♂
of genuine cameroni from material bred by him from larvae
taken on Gartmoor.

List of Syrphids revised by R. C. L. Perkins
see list dated 17/4/31.

Bred from 1929 larvae.

Athdown, WI. 7.7.29. Amauronematus cameroni ^{dark var.} or vittatus ♀
or n. sp. near there. Em. 6.5.30

Slade Brook, Glensmole } Pteronidea iberici 3♀♀ ^{I think these must have come from larvae or pupae which did not emerge in 1929.} bred from larvae
Co. DU. 3.9.29 } on Salix!! Em. 4 & 11/5/30 & "July(?)'30.

Garryduff, Co. WI. } Pteronidea feruginea 4♂♂, em. 18.6.30 & mounts.
29.9.29. } Nematus juciperis var. between this & Culex.
Em. 19.5.30.

1930 catch.

Amauronematus viduatus ♂. E. side lower reservoir, Glensmole, DU. 10/4/30.

Lygaeonematus mollis ♂. Oak wood, Clara, WI. 19/4/30.

Emphytus pallipes On sand, Calore, WX. 21/4/30.

Pontania collectanea (or Amauronematus sp. near viduatus or viduatus
var.) ♀. On Vaccinium behind Osmondia glade, Clara, WI. 25/4/30.

Thrinax mixta ^{not seen!} } Devil's Glen, WI.
♂♂ & ♀♀ } 26/4/30.

Empria trident ♂♂ & ♀♀ } 26/4/30.

Pleurocampa subana L. Don, WI - A.A. Linney. 27/4/30.

Dolerus liogaster 2♀♀. The Dingle, DU. A.A.L. & AWS. 1.5.30.

Dolerus liogaster 1♀. } Garryduff, WI.

D. madidus 1♂ } E.O.M. & AWS. 4/5/30.

D. oblongus ? ♂. } Marginstown Glen, WI.

D. madidus ♂ (green) } A.W.S. 4/5/30.

Empria sp. ♀. "probably liturata" on Marsh Marigold in
Enniskerry marsh, WI. 18/5/30.

2nd June 1930 (late evening of very hot day) cool breeze.
Upper part of Kelly's Glen, above Kilmashogue school,
Co. DU. 7 till 9 P.M.

Bombus lucorum + *agrorum* ♀♀ seen.

Dolerus senilis 1 ♂.

1 ich.

Salix pentandra just coming into flower & should
 repay visiting!

3rd June 1930. A very hot day.

First *Crabro varius* seen in garden at Mayfield.

Harold's Cross for season 1930!

5th June 1930 see below!

6th June 1930. Late afternoon, then dull & cool breeze.

Coast at Kilcoole station, Co. WI., with C. Oldham,

Father Kennedy & Peter Deane.

Practically nothing flying & only a couple of ichs.
 taken.

Odynerus pictus ♀ seen at station.

5.6.30. Powerscourt, deep park, Co. WI. 4.15 till 8.0 P.M. Fair day.
Sphex obscurus ♀♀. *Tenth. laticincta* ♂♂. *Thrinax maculosa* 2 ♀♀. *Ichneumon* *maculosa* ♂♂. *Seladonia stramineipes* ♀. *Ichneumon pilicornis* ♀. *Schneumon pilicornis* ♀.
Pimpla eximinator, small dark ♀; *Tenthredopsis* - red & black ♀.
Dolerus bimaculatus & *gerardi* as usual. *Ophion* *Spherotheca ruficornis*

[5/6/30. *Cladius difformis* taken in garden at Harold's Cross, Dublin]

8th June 1930. A perfect day, all sunny, & just
 a gentle sea breeze which did not interfere
 with collecting. With Palmer.

The Murren Pt., S. of Newcastle station, Co. WI.

Or coast unless otherwise stated. 2 = in marsh!

Bombus lucorum ^{very} 4 ♀♀, mostly in marsh. [no *terrestris*!]

B. hortorum ♀♀ frequent, 1 ♀ seen, mostly at *Anthyllus*

B. lapidarius ♀♀ common. *B. agrorum* ♀♀ frequent.

B. derhamellus several ♀♀. *B. muscorum* ♀♀ common, 1 ♀ seen.

B. jonellus one ♀ seen (AWS).

Psithyrus rupestris at least 3 ♀♀ seen.

B. barbutellus several ♀♀ seen.

B. sp. 2 ♀♀ seen, probably some *distinctus*.

Andrena albicans 1 very worn ♀.

[No *Halicti* seen]

Osmia aurulenta ♂♂ & ♀♀ mostly worn, common.

Sphex laticinctus about a dozen seen, both sexes, one ♀
 watched burying large green noctuid caterpillar. P.T.O.

Tachysphex pectinifer ♂♂ & ♀♀ very small, frequent

Pompilus gibbus ♂♂ & ♀♀ abundant

P. rufipes, ♂ (Palmer) swept along railway, ♀ seen (AWS).

Cerophales maculatus frequent. *Pomp. plumbeus* ♂♂ & ♀ seen.

12.6.30 cont. Swamp at Kippure Lodge, WI.
5 till 6 pm. Very hot sun at times.
A few iks taken at birch trees.

Psithyrus ?

Psithyrus sp. 2090.

19.

15th June 1930. A fine morning but turning
dull with rain at 1 pm.
Drove via Lough to Glenmacnass & home via
Sally Gap & Feather Bed, Co. WI.
Collected a few spp. in Glenmacnass, below fall.

[15/6/30. *Dineura testaceipes* ^{2♀ - one m!} (✓ R.C.L.P.) taken by R.A. Phillips at Kilbrannigan, Co. WI.
also *Tristiphora ruficornis* G. Blair

17th June 1930. Saw a very fresh ♂ *Megachile centuncularis*
sunning itself on wall in garden at Mayfield,
Harold's Cross, DU.

20th June 1930. Took a fresh ♂ *Megachile willughbiella*
in same place in garden, DU. Also a couple of
iks.

22nd June 1930. A blustering day, with heavy showers &
S.W. wind after 1 pm. Much sun in morning &
between showers. 1 = left bank in morning; 2 = right bank in afternoon.
Athdown, Co. WI. Both banks of R. Liffey by the
footbridge, as in 1929!

Bombus lucorum ♀♀ & a few worn ♀♀. *B. agrorum* ♀♀.

B. muscorum ♀♀. *B. jonellus* ♀♀ abundant in raspberry.

Andrena jactata 1 ♀ seen. *A. cineraria* ♀♀ frequent.

A. fucata ♀♀ common, ♂♂ worn. *A. vilkella* ♂♂ abundant

A. angustior 1 ♀ by path down field, (? had been on *Crepis*?)

Halictus calceolus, *nitidusculus*, *leucopus*, ♂: ♀♀.

Nomada ruficornis 1 ♀, *N. flavipunctata* 1 ♀, both by path down

Crabro palmipes ♂, many seen but ? all this sp.

Pompilus gibbus 1 small ♀, *P. ruficornis* 1 ♂.

Pamphilus rufus ♀ on birch, top of left bank, as before.

Tenthredopsis 1 ♀, several ♂♂.

Tenthredo armata only a few seen.

Tenthredella juncipennis 1 black ♀. *T. saltator* common.

T. atra, *T. livida* & *T. mesomela* common.

Dineura virididorsata ♀, ✓ R.C.L.P. on birch, top of left bank.

Athalia tricolor in oak wood.

P. T. O.

22/6/30 cont. Athdown cont.

Trichosoma lucorum 1 ♀ on birch, at top of left bank.

Dolerus niger. ♀♀ common on oaks on rt. bank. D. aeneus. 1 ♀ at 2.

Pimpla rufipes ♂. P. ruficornis ♂.

P. oculatoris typical ♀ + ?? another ♀ like a melanine form of same, with just trace of yellow at top of inner orbits. Both taken on Rowan tree at top of left bank above bridge.

Meadow Brown just out!

26/6/30 cont Knockmaroon cont.

Pemphredon ^{lethifer ♀ AWS. 3/11/30.} ~~lethifer~~

Bethylus (? pusicornis) seen, but lost in grass.

Chrysis ignita v. common on "cliff"

Glypta bicornis v. rostrata

Ringlet butterflies out!

26th June 1930. a/c. Knockmaroon, Co. Du.

Mostly dull & windy, but one half hour sun about 2.30. Worked old gravel pits joining the river & road near N. end of Guinness' new bridge.

In small pit nearer Dublin I took.

Andrena nigroaenea 1 very young ♀.

Solenura varicornis ♂.

Glypta bicornis v. rostrata ♂

In larger pit further on:—

Bombus lucorum a few ♀♀ only.

B. muscorum 1 or 2 ♀. [B. lapidarius or B. ruficornis]

B. agrorum ♀♀ + ♂♂. 1 ♀ seen in distance!

B. hortorum several small ♀♀ on Anthyllus flowers.

Andrena junci 1 young ♀ seen.

Halictus rubicundus only 1 ♀ seen.

Hylaeus communis ♂♂ + ♀♀ common on Blackberry flowers. ✓ RCLP.

Except for Andrena ♀ taken on 16/6/29 in my garden this is really first definite Irish record. 1 ♂ has yellow on scape.

H. minutus 1 ♀.

Cremastus varius ♂ + ♀. C. leucostomus ♀. C. dimidiatus ♂♂ + ♀.

C. capitatus 1 ♂, I think, taken on Sycamore leaf.

← ← ← cont.

28th June 1930. Left Dublin at 2.40 & drove to Wexford, with J. H. Palmer, for week-end.

3.40 - 4 pm. Scarawalsh Bridge, Co. WX.

Colletes montanum colony in parapet of the old bridge in full swing, but ^{♂♂ already worked and ♀♀} ~~not~~ ^{very} fresh. Hundreds & hundreds seen flying in the sun.

5.0 - 6.30 pm. Sand pit in field at S. end of the wooden bridge, Wexford. Very little sun after our arrival & very windy.

Bombus muscorum 1 ♀. *B. lucorum* 1 ♀.

Andrena wilkella 2 worn ♀♀.

Halictus rubicundus, *H. albipes*, *H. villosulus* (1), *H. nitidus* 9 ♀.

Sphex divinator ♀♀. *S. affinis* ♀.

Colletes montanum? burrows on ^{stone} parapet of road to bridge.

Crabro peltaria ♂♂, rare, ♀♀ common, many carrying flies.

♀♀ varied much in size, but all noted gripped fly under hind left "steri".

Aspachus tumidus 1 very fresh ♀ sitting on face of "cliff".

Myrmica melanoccephala 2 ♂♂, 1 ♀ with reddish head.

Pteronidea myosotidis ♀, ^{RC & P!} taken by Palmer.

28.6.30 cont

Late in the evening took a ♀ sawfly, *Empyga* ^{IRCLP.} *pallipes* ♀ sitting on bare sand in dune S.E. of Curracloe House, WX (9 pm.!), where we had dinner on & pitched camp.

29th June 1930. A dull morning, with a few bursts of sun between 9 & 10 AM, but wind SE & strong, barometer falling & rain squalls from 11 AM till 9 pm. No sun after 10 AM. Began work at 8 AM. & took 1 ♀ *Gonatopus*

about 8.40 AM in sand hollow. There also *Larix niger*. First run at 9 AM. Saw many *Colletes montanum* appeared. After 10 AM. the only things taken or seen were along marsh on *Heracleum* &:

Colletes montanum ♂♂ & ♀♀ abundant on *Euphorbia*, *Leontodon*, *Rubus*, *Heracleum*, *Geranium* &:

Bombus agrorum ♀♀ seen on *Scrophularia nodosa* by Palmer.

B. muscorum ♀ seen & also a ♀ which was distinguished?

Compilum plumbeum ♂♂ & ♀♀. *P. rufipes* 1 ♂, 1 ♀ (Palmer).

Hedychridium ardens 1 on *Leontodon* flower. ^{*Athalia lineolata* ♂♂ ♀ on *Heracleum*.}

Proctosyncha fuscipennis ♂♂ abundant on *Heracleum*. ^{*Tenthredo arcuata*.}

Pimpla instigator 1 large ♀ on *Heracleum* (Palmer).

Meloboris punctatus ♂♂. *Curculio* genus 2 ♀♀.

Several other insects.

29/6/30 cont. After rain, 9 till 10 pm.

Lanes W. of Curracloe & between that & main road to Blackwater. Several small sand-pits.

Halictus villosulus 3 ♀♀ dug out of a great colony of fresh burrows in one sand pit - on floor of pit!

Crabro peltarius also dug out of burrows.

Bombus distinguendus ♀ near Curracloe House at 10 pm. (Palmer).

30th June 1930. A warm misty morning with S-SE wind: some hot sun between 9 & 10 AM. After that dull & from 12 noon rain or mist till we got in sight of Dublin, where it had been very hot & fine all day but raining in the hills.

9-30 till 11.30 AM. Sandpit at Wexford, as before. Considerable hot sun bursts. Very warm!

Bombus lucorum 1 ♀ seen on white clover.

Andrena carbonaria several ♀♀ seen at one of the smaller banks in bottom of pit: all very young & wild.

One, rather worn, taken by Palmer. No sign of ♂♂.

[Should be looked for evidently in 1st or 2nd week of June!]

30.6.30 cont. Sandpit at Wexford cont.

Andrena wilkella several old ♀♀ seen.

A. gurgenea 2 ♂♂ found 1 fresh ♂ taken.

A. gurgenea 1 old worn ♂ taken on branch in small isolated pit in middle of field.

Halictus rubicundus 1 fresh ♂ on this very early date!

♀♀ common & some looked very fresh!

H. albipes, *H. tumulosus* & *H. nitidiusculus* ♀♀ seen.

Colletes (*montanum*?) ♂♂ seen in thistles, ♂♂ & ♀♀ at bridge.

Crabro peltarius abundant, mostly ♀♀.

Salix exaltatus 1 ♀ dug out of burrow by Palmer.

Myrmica melanoccephala ♂♂ common.

30.6.30 cont. 12 noon till 2 pm.

Banks of R. Bann^① & sandpit at Clone^②, Co. UX.

Colletes montanum ♂♂ & ♀♀? *C. darwini* 1 ♂ at 2.

Hyssopus hyalinitus ♀♀ on Jasione & Leon todon at 2.

Myrmica melanoccephala ♂♂ at 2.

Crabro podagricus ♂ at 1 on Oenanthe.

C. chrysostomus ♂ at 1. *C. peltarius* at 2.

Myrmica sp. ♀ on Oenanthe at 1.

Halictus sp. seen at 2.

Tenthredella atra ♀ seen at 1. *Tenthredo areolata*.

30.6.30 cont. Kildavin sand pit, Co. CW.
in heavy rain 2.30 pm.
Absolutely nothing seen!

30.6.30 cont 3 till 4 pm. Heavy rain.
Glen at Kilmory Bridge, Co. CW.
Odynerus rimator } taken on *Oenothera*.
Crabro }
Bombus hortorum ♀ seen at Foxlows.
Lasius fuliginosus as busy as ever!

Afterwards left Kilmory & drove home
via Tallon district & Ballynaglan, arriving
Dublin at 6.30. Much more insect ground W.
of Tallon!

Sat: 5th July 1930. A very hot soft day, all sunny
till aft. but dull & very hot after 5 pm.
Garden, at Mayfield, Harold's Cross Dublin. 5.30 till
9 pm.
Megachile willughbiella 2 ♂♂ & 2 ♀♀ on *Campanula*.
Crabro various common till 8 pm.
Cuscuta blurring moth, 1 flying 5.30 pm. 1 on leaf 9 pm.
Several ichs. & 1 red *Brachid*:-

4th July 1930, late evening, 6.50 - 7.30 pm.
Old quarries at Sandycroft, Co. DU.
To look for *Colletes*, but none seen.
Several spp. of ichs. taken on *Geranium*!:-
Alomyia debellator, black ♂, 1 red ♀.
Pimpla robusta ♀. *Mesoleius*, ♀.

6th July 1930 A beautiful day after a dull morning & misty
rain till 11 AM.

11.30 till 2 pm. Old sand pit facing river at
Knockmaroon, Co. DU. as before.

Bombus muscorum ♀♀. *B. agrorum* ♀♀. *B. lucorum* ♀♀.
B. hortorum 1 ♀ seen, many ♀♀, 1 fresh ♂ on *Hypericum*.
Psithyrus sp.? a fresh ♂ seen, possibly *P. barbutellus*.
Andrena f. aucti, very common ♀.
Halictus several ♀♀ seen, probably common spp.

Hy. leucis communis ♂♂ & ♀♀ abundant, very visible in sight.
Crabro dimidiatus ♂♂ & ♀♀, latter carrying flies under left
hind venter like *puttani* did at Wexford.

C. nigrus ♂♂ & ♀♀. *C. capitatus* ♂♂ & ♀♀.
C. tibialis 4 ♀♀, new to Dublin. *C. quadrimaculatus* ♂.
Panulocera morilicornis 1 very small ♀.

6.7.30 cont. Knocknecrow, cont.

Chrysis ignita.

Stenopus auratus ⁵ ex. in small yew tree bush.

Pemphredon luteicornis 1 ♀.

Pompilus pilosus 1 worn ♀.

Elypta ceratita ♂. *E. luciae* v. *rostrata* 2 ♂♂.

Leucosticta tollator (?) 1 fresh ♀. *E. cylindricornis* ♀.

Pimpla maculator ♂. *P. ventrator* ♂.

2nd brood of
Spuckled Wood &
Tortoiseshell
out!

6.7.30 cont. 2.30 - 5 pm. Lucas demense, Co. Du.

Almost all taken in old sandpit!

Bombus lucorum, *agrorum* ♀♀. *B. hortorum* 1 ♂ on *Rubus*.

Vespa ♀♀ seen.

Andrena grisea & *villosa* old worn ♀♀ seen.

A. mellea ♂♂ & ♀♀, fresh 2nd brood! *A. gryneus* ♂ 2nd brood.

Halictus rubicundus, *tumulus*, *fulvipes* ♂♂.

Sphex muniticornis worn ♀♀ frequent. *S. dissimilis* small ♀.

Crabro 4-maculatus ♂♂ & ♀♀ abundant.

6.7.30. Lucas demense cont.

Ichneumon sp.? ♂. 1st 9.30.

8.7.30. Fri. day: sunny & warm: garden at
Mayfield, Harold's Cross, Dublin.

Halictus leucopus ♀♀ collecting at *Campanula portenschlagiana*
& N.Z. *Veronica* sp. ♂♂ abundant flying over print
hedge!

9th July 1930. A fine day, after a dull drizzling morning.
Warm, plenty of sun, some clouds, rather windy.

The Burren, N. of Portlaoine, Co. Du.

11.30 AM till 4 pm.

All labelled

Bombus lucorum, *agrorum*, *muscorum*, *hortorum* ^{Portlaoine N.}
& *Lepidoptera* ♀♀ ♀♀ seen. ^{Co. Du. AWS.}
^{9.7.30.}

B. terrestris? 1 ♂, worn, with black face but white tail.

Psithyrus distictus 1 very fresh ♂: very yellow tail!

Halictus rubicundus ♀♀ on *Ranunculus acris*.

Halictus piceus 1 ♀ on *Leontodon* at N. end of Burren.

9.7.30 cont. Portman N. cont.

Crabro venustuli common at N. end of Barrow.

C. paluipis ♂♂ & ♀♀ about old field ditch.

C. chrysostomus 2 ♀♀ on Pteris laterals in fields.

C. peltarum 1 ♂, very large ♀♀ in fields on Pteris & at N. end in Spurge.

Oxybelus uniguttatus ♂♂ & ♀♀ common at N. end, on sand, as well as on Carduus arvensis, & ?

Pompilus gibbus 1 ♀ at S. end on wild carrot.

Tachysphex pectorator 1 ♂ on Wild Carrot

Pompilus plumbeus abundant. } particularly at
Ceroplasta maculata abundant. } N. end!

Bethylenus parvicornis 1 taken, 1 larger, seen.

Athalia in fields! Tenthredo arcuata seen.

Pimpla brevicornis ♀♀ at N. end (? sp.). P. maculata ♀

Leucospota bellator ♀. L. parallelus ♂♂ common on wild carrot.

L. errabunda ♀.

Glypta ♂

9.7.30 evening! Garden at Mayfield, Harold's Cross DU.
Megachile villosipennis ♂♂ & 1 ♀ seen.

M. ♂.

M. ? monilicornis ♀ seen to enter flower of pink Snapdragon: always entered upside down, the flower completely closing after it had gone in!

10th July 1930! morning: Front garden hedge, Mayfield, Harold's Cross, DU. Halictus leucopus ♂♂ common on primrose & flying along hedge!

ARKLOW TRIP. July 1930.

10th July 1930. Left Dublin, with George, at 2 pm.
 & arrived Arklow at 5 pm. A fine hot day
 in Dublin, but met a cold E. wind in Glen
 of the Drom & thence mostly dull.

Stopped at Ballyhenry quarry, Co. WI. 3-4 pm.
Hyalea ^{hyalinator} ~~confusa~~ ^{many} ♂♂, ^{1 ♀} abundant on stone heap.

H. confusa ♂ on humble flower.

No other aculeates seen & no sign of life at
 "cliff".

10.7.30 cont

Walked to 2nd bay N of Arklow after tea!

Took a small tick in "Norton" on window, & a ♂
 braconid, ♀, in bath room.

11th July 1930. A dull morning, with some rain
 between 11 AM & 1 PM. Fine in afternoon, but
 gloom from 5 pm. on & all night.
 Stayed at "Norton" all day with George, playing cricket
 in aft. & evening.

12th July 1930. A glorious morning, ^{turning} ~~dull~~ dull, with
 chilly E. wind at intervals for rest of day after
 11 AM. Drove to Ennecilly, & walked along

dune to Nigen Head & back, Co. WI. 11 AM - 1 PM.

^{very little seen while there!}
Bombus lapidarius ♀♀ abundant, *agrorum*, *lucorum* &
Muscorum also seen, also 1 ♂ *jonellus* in car.

Andrena fucata 1 ♂ on spurge near Nigen Hd.

Colletes piceitarsis ♂♂ & ♀♀ common.

Hyalea ^{monstrum} ♂ on spurge, another seen.

Pompilus plumbeus ♀♀ frequent.

P. ^{sp.} ♂ near Nigen Hd. (between this & outlet of river)
Cerophora maculata common.

Tachysphex pectinipes 1 large ♀.

Stenobothrus *luteicornis* about 1 doz. ♀♀ seen.

Crabro 1 ♀ ? *palmipes* taken near Nigen Hd. but lost!

Odynerus 3 *marginatus* ♂ & ♀ on Sea Pinks at Nigen Hd.

Cladius pectinicornis 10?

Leucostoma parallelum ♂♂ seen.

Red Admiral ^{just} flew into car on
 drive home!
Gryllus seen.

Labelled
 Bonitas Bay
 12.7.30

149.

12-7-30 cont. afternoon. Mostly dull & cool.
Caught several icks about Norton, W.

13th July 1930 (Sunday). SE wind, a depression approaching, mostly drizzling! Fine sky in forenoon & for an hour between 5 & 6 pm. Very heavy rain & gale from 7 pm all night.

Drove to Arreca, Co. WI. & explored old lane on N. side of valley 1/4 N. of Ballygarthgate. There saw or took:—

Bombus agrorum, *lucorum*, *lapidarius* (1) ♀♀.
Andrena fucata, seen ♀♀ (2) on branch.

~~*Andrena fucata*~~

Centredella linde ♂ & ♀. *Atthia lineolata* seen.
Several icks:—

Exochus ♂

150.

13.7.30 cont. afternoon. Auklov!

Walked across Kynoch's to first point & back but nothing out: very windy!

14th July 1930. Storm continues & mostly raining. In morning drove to Enniscully with George & spent an hour at mouth of Redcross River, Co. WI. Saw many *Colletes piceitarsus* on flowers at 1st point S. of river.

15th July 1930 Storm continues, after pause in night. Early morning fine, but dull after 9 AM. Drove to Deputy's Pass, Co. WI, 11.30 - 12.45 noon, where had been seen before my arrival & things just going in an approach of cold drizzle from South:—

Bombus muscorum, *agrorum* & *lucorum* ♀♀.

Psithyrus distinctus ♂.

Andrena coitana ♂ & ♀. *G. ...* ♂.

Vespa sp. seen.

Atthia lineolata ♂. *Trichocampus erodactylus* ♀ on *Euonymus*.

Antonalus abrogathetus ♂ on W. side of pass near fallen living oak.

Pimpla turionellae ♂. *Phytodietus* ♂.

cont.

15.7.30 cont. Rain commenced at 12.45 & getting heavier as day advanced had not ceased at 11 pm. At 5.30 pm. after heaviest rain saw Apis mellifera ♀♀ entering hole in ash tree on coast road N. of Ferrybank, never just noticed in 1926!

16th July 1930. Storm continues. More or less dull & raining all morning: during one blip of sun I took 1♂ 2♀♀ Colletes pinctus on Thyme in hollow ^{of dunes} S. of Merton gate, where I also saw a ♂ Megachile maritima.
Fine in afternoon, but very windy & no sun.

17th July 1930. Clearing! A fine morning along coast; "jim" inland. Drove to sandhills at Kilgorman, Co. DX 11^{am} till 1 pm.

Bombus lucorum, agrorum & lapidarius ♀♀
Some ♂♂ lucorum also seen.

Halictus villosulus ♀♀ in dune ^{N.} E. of road.

Pompilus pectorator ♀ in usual spot - N. of road.

P. gibbosus ♀ on coast by stream at foot of road.

P. plumbeus common.

Cerophora maculatus common.

17.7.30 cont. Kilgorman, W.X. cont.

Salix exaltatus ♂♂ & ♀.

Mellinus arvensis seen by stream.

Crabro veruculi common.

Megachile maritima ♀ taken & another seen by stream carrying piece of leaf (? ^{piece} ~~mark~~ of Salix leaf!)

Some ichs. taken: mostly on coast by stream.

Lissonota parallela ♂♂ common

L. ♀ on spray N. of road.

Glypta ♂♂ & ♀♀

17.7.30 aft. Drove to Dublin

Stopped at Ballyhenry quarry for a few minutes.

Bombus distinguendus ♂ or fresh ♀ seen on heather.

Vespa norvegica ♂ on heath: 1st ♂ seen 1930.

Lissonota bellator

Pristiphora pallidiventris, a black ♀ (R.C.C.P.)

Also a couple of ichs. & small braconids taken in motor between Arklow & Ballyhenry!

18th July 1930. Storm continues: strong NW-W wind & misty rain. Drove all back to Arklow: misty rain all the way as far as Redcross, but sun out at Arklow on arrival, though very windy & wind W-SW. Collected nothing!

18.7.30 cont. Afternoon: improving & some good sun bursts. Drove to Mr. Cork's egg-farm S. of Inch & back to Arklow. Collected along roadside on carrots & c. S. of Inch, Wx. *Psithyrus rufestris* ♀, Very small & very worn. *Bombus hortorum* ♂. *Pimpla examinatrix* ♂. *Lissonota bellator* ♂.

Halictus confusus ♂. *Halictus confusus* ♂.

18.7.30. 5.30-6.0 pm. Sunny, very windy.

Brickfields S. of "merton", Arklow, Wx.

Lissonota bellator ♂. *Glypta ceratites* 1 ♂.

Athalia lineolata ♀. in sunny place.

19th July 1930 Storm continues: very high W-SW wind all night, barometer rising at last, misty rain all morning, getting warmer.

In afternoon drove to meeting of the Waters, Arva, WI. Here collected along railway line from 2.30 till 5 pm. Very hot, very little sun, but flies very bad & most things out.

Bombus hortorum ♂. Also *B. lucorum* & *agrorum* ♂♀.

Psithyrus barbatellus ♂ seen.

Andrena humilis 2 ♀♀, seen fairly fresh, on ^{*crucis ignea*} ~~*crucis ignea*~~ flowers on side of ry. cutting between railway & river above the Castle Howard bridge (i.e. 1st bridge over river N. of Meeting!). First record outside Cork & Kerry in Ireland & the first specimen I have taken.

A. coitana ♂♂ & ♀♀. } at same place

A. tarsata 1 ♂ } on Juncus.

A. subopaca 1 ♀, ^{rather worn!} ~~*subopaca*~~ } Also 1 ♂ *A. gryneus* 2 ♂♂.

Nomada obtusifrons ♂♂ & ♀, very fresh. *Crabro dimidiata* ♂.

Crabro rufus ♀, *Myrmica spurius* ♀, *Gorytes mystaceus* ♀, all on *Angelica*.

Athalia lineolata in scrub.

About 15 spp. of ich. also taken. *Lissonota bellator* ♂ (not kept).

Glypta menaurator ♀. *G. ceratites* ♂. *G. varicosa* ♂.

Pimpla inquisitor a small ♀?

3 *Torymus*.

19.7.30 cont. Meeting of the Waters cont.

Foenus affectator ♀ on Angelica by ry. just above Castle Howard bridge.

20th July 1930. A dull day with keen N.E. wind.
 & no real sun till we were starting for
 home, then all blue sky till dark. Not much
 out!

Meeting of the Waters, Co. WI. 12 noon till 5 pm.

Bombus lapidarius ♂ very fresh & ♀♀. *B. lucorum* ♂♂.

Psithyrus distinctus ♂♂ seen. Add. to list of 19.7.30.

Andrena humilis 3 ♀♀ taken, 3 ♀♀ more seen, on ^{brake} ~~brake~~
 & one alternately on ^{brake} ~~brake~~ & *Hypochaeris* & seeming
 to prefer the latter. All along sides of railway
 cutting as before. One heavily laden ♀ seen to
 cross river & subsequent investigation suggested
 that the species might be nesting on old cart-tracks
 on E. side of the river opposite cutting! Want of
 sun however prevented this being proved. All ♀♀
 seemed fairly fresh!

20.7.30 cont. M. of the Waters cont.

Andrena coitana ♂♂ & ♀♀ common. *A. tarsata* ♂♂ & ♀♀
 a pair seen & fresh.

A. guzman 1 ♀ on farion (2nd brood).

A. dentulata 1 ♂ & 1 ♀ very fresh in Solidago.

Haliastur rubicundus ♂♂ abundant, a few ♀♀ (? some fresh).

H. villomulus 2 ♀♀, one very large. *H. freygessneri*, 2 ♂♂.

H. "meathenellus": Irish form: 1 fresh ♂.

H. leucopus ♂♂ & fresh ♀♀. *Leptothorax* ^{var.} *decoloratus* ♂♂.

Nomada obtusifrons 2 ♀♀. *Sphecius* ^{var.} *divinus* ♂♂ at bottom of
H. rubicundus!

Hyloicus minutus 1 ♂ without any *Rita tomentum* on head segment.

Apis mellifera (Dutch Bee?) nesting in big stumps.

Crabro rufus ♀♀ seen. *A. leucostoma* ♀♀. *C. v. maculata* 1 at
 2nd bridge.

Prenatalus pallipes on bird near big stump at ry. bridge.

Megachile willughbiella ♀, var. *hibernica*.

Athalia lugens? *A. lineolata*?

Many spp. ichneumonids: — 2 ♀♀ *limnata* at big stump

& one ♀ *meniscus impressus* seen there but missed.

Leucostoma bellator on *Cosmosiph.* ^{glypta} *lyonensis* ♂♂ & ♀♀ on *Cosmosiph.*

Glypta ^{lyonensis} *lyonensis* 2 ♀♀ (not seen, not recorded to be fresh).

Phytodietia

Phytodietia (Proctos) *phippus* ♀. *Super* *humboldt* ♂♂. *Super* *humboldt* ♂♂.

Bombus subcylindricus ♂♂. *Proctos* *phippus* ♀.

20.7.30 cont. Meeting of the Waters, WI cont.

20.7.30. evening. About a dozen larvae of *Stenobothrus* on *Salix cinerea* in brickfields at Merton, Arklow, WI. taken into house.

Apparently nearly ready to pupate. On 12.7.30 there seemed a couple of days old & were all together on their 2nd leaf of the willow, next to the leaf the eggs had been laid in!

Pupated from 22nd till 24th July & 40th & 89th emerged from 15th till 19th August 1930!

21st July 1930. A stormy day, NW wind, very chilly, & only some odd sun-blinks.

Meeting of the waters, Co. WI as before, 11.30-12.30 noon. Spent the hour watching supposed burrows of *Andrena humilis* but nothing seen. Hugh found *Stenogaster aeneiventris* ♂ sitting on the bracken. Took small Braconid in net. *Bombus muscorum*, fresh ♂ on *Myrica*.

21.7.30 cont. Afternoon: very little sun, chilly.

Spent 2 hours in Webb's Glen, Arklow, WI.

Very little seen! About a doz. spp. of ticks taken!

Athalia lutea. *A. lineolata*.

Glypta flavolineata ♀ in ivy. *G. eratites* ♂. *Elytus fontinalis* ♂.

Pimpla alternans 11 ♀. *P. detrita* (?) ♂. *Perilissus filicornis* ♂.

Bombus jonellus ♀♀ on Rubus. *B. lucorum*, *agrorum*, *hortorum* ♂♂.

Bombus distinguendus ♀♀ on Rubus & *C. arvensis*.

Andrena coitana & *nomada apterigena* ♂♂ seen on *C. arvensis*.

22nd July 1930. A dull day, with high barometer & cold N-NW wind (strong).

Drove to Cahore, WX, but stopped for half an hour in quarry near Banoge quarries, S. of Gorey.

11.30-12 noon. Banoge quarry.

Bombus terrestris, fresh ♂ on Rubus. *B. distinguendus* ♀.

B. hortorum, *agrorum* ♀♀.

No other bees seen, as too dull: a few ticks taken & 1 ♀ each *Athalia lutea* & *lineolata*?

Glypta flavolineata ♂.

Lissonota variabilis? small ♀.

Empididae?

22.7.30 cont. Cahore, Co. WX.

12.30 - 3.0 pm. Very little sun, though warm along coast out of wind. Worked strip of dunes S. of point & between that & track to beach.

[*Bombus distinguendus* ♂ flew into net on return Banoge & Cahore]

Bombus lucorum, *lapidarius*, *agrorum*, *muscorum* ♂♂
also *lucorum* ♂♂.

Psithyrus bartholomaeus ♂♂.

Andrena fucata ♂ one worn ♀ in Rubus.

Colletes montanum a few only seen ♂? & ♀ taken.

Colletes picinervis ♂♂ abundant; a few ♀♀ seen.

Tachysphex pectorator several large ♀♀.

Oxybelus uniguttatus frequent on *Carduus arvensis*.

Ox. argentatus 100 at spurge.

Halictus ceruleus maculatus & *Pompilus plumbeus* abundant.

Pompilus rufipes 100, others seen on spurge.

Crabro ruficornis abundant.

Andrena signatorum

Stratiomys pictus ? ♀ on spurge near track.

22.7.30. cont. Cahore, cont.

22.7.30 cont. Left Cahore about 3 pm & drove west, crossing Ballycane - Jorey road, to Carrickroe Hill, which ascended - rocky top, with bare ground (? burnt) & much *Erica cinerea* in flower at which many *Bombus*, including *B. jonellus* ♂♂, *B. lucorum* ♂♂ & ♀♀, *B. agrorum* ♂♂, *B. muscorum* ♂♂ very fresh!, *B. lapidarius* ♂♂. Also *B. hortorum* ♂♂ at *Taurium* flowers.

On N. side of this hill is remnant of an old Oak-Birch wood, but too dull & cold for anything to be out. Near summit are many seedling willows growing on bare ground (alt. ca. 700 feet) & on them were taken several nets of *Pteronidea*?

larvae, which were brought home to rear.

Also larvae of *Puss moth*.

Bombus jonellus ♂♂ taken on summit of hill at Carrickroe Hill, WX.
on 22.7.30.

Braconid Phaeogenes dentata ♂ taken on summit of hill at Carrickroe Hill, WX.

23-1 July 1930. Another dull day, with strong cold N-NW winds, but a little more sun, especially in the afternoon.

11-30 - 12-30 P.M. noon. Deputy's Pass, C.W.

Work path to "old garden" on E. side of pass.

Bombus lapidarius ♂♂, *B. lucorum* ♂♂ & ♀♀, *B. agrorum* ♂♂.

B. hortorum ♀♀ & ♂♂.

Psithyrus barbutellus ♂♂ & *B. distinctus* ♂♂.

Andrena miniata? ♂♂ on banks round garden.

A. coitana ♀♀. *Nomada sturipennis* ♂♂.

Hylaeus confusus ♀.

Crabro varius

Trypoxylon claricorne ♂♂ & ♀ at usual stumps.

"*Lissonota*" 2 ♀♀ on stump: 1 = *Meniscus impressor* ♀.

Lissonota palpalis ♀ & also a ♂?

23-7-30 cont.

1-30 - 2-30 P.M. noon, C.W. near goods station.

Too cold & very little sun.

2-30 till 4.50 p.m. Some sun, not much out.

Meeting of the Valleys, C.W., above Castle Howard Gate, as before. All west of river, along railway unless otherwise stated. 23.7.30!

Andrena lamellata 1 ♀ taken on railway at Hypocorin, & one ♀ dug out of burrow on trackway on E. side of river thus proving that the species nests there; still no sign of ♂♂.

A. dentifrons 1 ♂, 1 ♀ seen on Solidago.

A. coitana ♂♂ & ♀♀ seen. [*A. miniata*? 1 ♀ seen.]

Nomada sturipennis ♂, *N. sturipennis* a small ♀. A.W.S. 11.1.32!

Megachile versicolor 1 ♀ var. *litorea* on thimbleweed flower.

Crabro podagraceus 1 on ivy at bridge (road to C. Howard Gate).

C. varius & *C. vagans* ♀ seen.

Salix exaltata ♂ & ♀♀ on E. bank of river.

23. 7. 30 cont. Meeting of the Waters cont.

Teuthrodella peruviana ♀♀. *T. livida* ♂ seen.

Pimpla oviroa ♀. *Bassus tricornatus* 1 ♂.

Glypta mensurator ♂ & ♀ (? ♂). *Phytodictus geniculatus* ? ♂.

Polyphincta varipes ♀

Aspilota ? sp. ^(not taken) 1 ♀ seen off at edge of field near river.

Pygostola stictica ?

24th July 1930. A fine morning, but turning dull after 11 AM; subsequently only a few flimsy sun, wind W., not so cold; yet little out.

Meeting of the Waters, Co. WI. as before

1. Left bank of river where *Andrena humilis* nests.
2. Right bank of river up to old sawmills (Barnelli)
3. Ry. bank &c. at ry. bridge, beside old sawmills.

Bombus lapidarius ♀♀, *B. lucorum* ♂♂ & ♀♀, *B. agrorum* ♀♀.

B. muscorum ♀♀ at heather (*S. cinerea*) by railway below 3.

B. hortorum ♀♀. *B. derhamellus* ♂

Andrena ♂♂ on *Rubus* by railway below 3.

P. distinctus ♂♂. *P. laticinctus* ♂♂ & ♀♀.

Andrena viciae ♂♂ & ♀♀.

A. minutula ♂

24. 7. 30 cont. Meeting of the Waters cont.

Andrena humilis many ♀♀ seen at burrows in old track through the scrub at 1. Not a trace of a ♂.

Helictes rubicundus ♂♂. *H. albipes* 1 fresh ♂, ♀♀ seen.

H. tumulorum 1 fresh ♀ seen. *Sphex* *divinus* 1 very common ♀.

Mesochorus sturpator ♂♂. *M. rufipes* 2 ♀♀ in ragwort at 1.

Crabro rarin frequent & nesting in mud with *A. humilis*.

Mellinus arvensis seen.

Odynerus sinuatus ♀ at 3. *Verpa* spp. (♂♂ & ♀♀) seen.

Pompilus nigerimus ? ♂ at 1.

Atalia at 1 & 2.

Automalus albipunctatus ♂ in scrub at 1.

Glypta mensurator ♀ (?) stepping thistle head (*G. palustris*) with tube at 2. *G. evanescens* 1 small ♂ at 1.

Pimpla oviroa ♀ at 1. *P. inquisitor* 2 ♀♀ at 1.

Phytodictus ♂ at 1. *Lampronota caligata* 1 ♂ at 2 & 3.

Perilissus *fulvipes* ♂ at 3. *Chrysis* *sericea* ♂ at 2 & 3.

Trematopys *nigra* ♀ at 3. *Chrysis* *sericea* ♂ at 3.

25th July 1930. Another mainly dull day: wind round to S-SE, very strong: depression approaching: only short spells of sun in forenoon, none later.
Clara, Co. WI.

1. Right bank of river for 1/4 mile below bridge.
2. Oak-woods & sand-flat (1 mile below bridge) on left bank of river.

Colletes succinatus, fresh ♂ at 1 on gravel flat.

Bombus jonellus 1 ♂ in woods. B. agrorum ♀♀.

B. lucorum ♀♀ & 1 fresh ♀ seen in woods.

Andrena munduscula 1 ♂ at 1. A. tarsata a few ♀♀ at 2.

A. mima 1 ♂ at 2. A. coitana ♀♀ at 1.

Halictus villorum ♀♀ at Crupini river at 1.

H. rubicundus ♂♂ abundant at 2, some at 1.

H. alpinus 1 ♂ at Crupini at 1.

Nomada obtusipennis 2 ♀♀ at 1 on Crupini.

Compilum fittum, very fresh ♀ on Angelica at 1.

[C. approximatum. None seen at 1 on gravel flat.]

Crabro rapus 1 ♀ on Angelica at 1.

C. prodigiosus 4 ♀♀ on Angelica at 1.

C. varius frequent at 2.

C. peltarius ♀♀ very abundant at 2: more abundant than I have ever seen before on the sand-flat; the only one seen carrying a fly did so under the right hind "vater".

25.7.30 cont. Clara cont.

Mellicerus arvensis in extraordinary abundance in field at 1

Cathalia at 1 & 2. Bombus lucorum ♂ at 2.

Trithrudella virida ♂♂ seen at 2

Automalus altigattatus 2 ♂♂, 1 ♀ in oak-woods at 2.

Pimpla rufata at 2. Pimpla trivittata ♂ at 2.

Glypta ceratites at 1 & 2.

Polysphincta varipes ♀ at Oenanthe crocata at 1.

Phytodietus gambelii? ♂ at 2.

Lissonota transversa 3 ♂♂ at 1. L. errabunda 1 ♂ at 1. ♂ at 2.

Homocidus pictus? ♂ & ♀ at 1. Homocidus ♂ at 2.

Mesochorus ♂ at 2. Exochus praeceptor ♂ at 2.

26th July 1930. After a wet night, a soft warm day with lots of sun, wind rather high S-SW.:
Glorious in afternoon.

Rathdrum, Co. WI: right bank of valley from station to Arundale

1. Near station. 2. near Arundale footbridge.

Bombus lucorum ♀♀, + 1 or 2 ♂♂. *B. agrorum* ♀♀.

B. muscorum several ♀♀. *B. lapidarius* ♀♀, 1 ♂.

Andrena coitana ♂♂ + ♀♀. *A. fucata*? old ♀ seen on Rubus at 2.

Halictus confusus, *H. freygessneri* ♂♂.

Sphaerocera affinis ♀ seen at 1.

Nomada sturpiformis ♂♂ + ♀♀.

Mellinus arvensis ♂♂ abundant, also a few ♀♀.

Gorytes mystaceus 1 ♀ seen on Angelica below road.

Crabro varium frequent. *C. rufus* common.

[No other spp. of *Crabro* seen during day & no sign of *C. aphidum* at either of its stations]

Pemphredon shuckardi 1 ♀.

Pompilus ruficornis ♂♂ + ♀ seen near 2. Also ♂ at 1.

Salix exaltatus ♂♂ + ♀♀ at 2.

26-7-30 cont. Rathdrum cont.

Tenthredo arcuata only a few seen: seems unusually scarce this season!

Tenthredella linida a few ♂♂ seen at 1.

Atalia

Atalia 2 ♂♂ on footbridge at 1. { = a sp. ? near n. sp. of the Dents' Glen RCLB. }
= *At. fuscicornis* Benson
= *At. Bensoni* 1931

Selandria morio 1 ♀ near 2. *S. sericea* 1 large ♀ at 2.

Tenura dohrni ♀♀, many, on alder at 2. ✓ RCLB.

Zarusa fasciata ♀ sitting on *Salix caprea* leaf at 1.

Stelopus gagates 1 ♂.

Pimpla rufata ♀ at 1. *P. ruficornis*? ♀. *P. debilis* ♂.

Leisonota cylindrator 2 ♂♂, 1 ♀.

Leisonota femorata 4 ♀♀ at big log at 2. *L. densator* 1 ♀

L. fulva ♂♂ + ♀♀. *L. bellator* ♂♂ + ♀♀ on Angelica

Glypta curvipes 2 ♂♂. *Leisonota cylindrator* 2 ♂♂

Leisonota ♂♂ + ♀♀ on *Salix caprea* leaf at 1.

several other spp. of *Leisonota*.

Some spp. including 2 *Barichneumon* on grass near road.

[*Neurostictus* or *Myrmica* ♂♂ at other stations. *Phaenocarpa* 1 ♂ seen on

the *Barichneumon* exposed to them on grass near the 1st station

on 2/12/30 (RCLB)]

27th July 1930. A wild day, with strong S.W. wind
 & showers passing over hills all day (for a while),
 much sun near coast & inland to Broughan.

11 AM till 12.30 noon.

Sandhills ^② S. of Limerick, Co. WI. & scrub in valley
 inland of road (1).

Bombus distinguendus ^{a small ♂} on *Thymus*. *B. lucorum* ♂ + ♀♀.

B. agrorum, *muscorum* & *lapidarius* ♀♀.

Colletes picistigma ♂♂ + ♀♀ fresh & abundant on
Carduus arvensis, *Asellus nitidus* + ♂ at 1, on *Sparganium* at 2.

Mezobius montana 1 fresh ♀ at *Thymus* ^{at 2}; *Asellus*
 cut in scrub at 1.

Odynerus ♀ seen at 1 (probably *parietarius*!)

Crabro varius ♂ at 1

Atthalia at 1. *Allantus cinctus* seen at 2

Fenusa debilis ♀♀ on Alder at 1. *Tenthredo armata* at 1

Proctosus praeiparis ♀ amongst bracken & thistles at 1.

Pimpla detrita? ♂ at 1.

27.7.30 afternoon. Very stormy, but considerable sun.

Drove via Inch, to Killinierin, Ballyneastrow, &
 Hollyport to Forey & home by main road, Co. WX.

Stops to collect at:—

1. = Larch Hill, S. of Inch [labelled "near Inch"], by roadside.

2. = roadside at Killinierin.

3. = heath & boggy pasture N.W. of Ballyneastrow.

Bombus distinguendus ♂ + ♀♀ at 3. *B. lucorum* & *jonellus* ♀♀ at 3.

B. hortorum ♂ on *Rubus* at 1 + 3. *B. agrorum* & *muscorum* ♀♀ at 3.

Psithyrus campestris ♂ var. *franciscanus* (1st ♂ 1930) at 1.

Andrena tarsata ♀♀ commonly nesting in ditch (earth & stones) &
 amongst Calluna on heath path at 3. Quite fresh.

Halictus nitidus ♀ at 1. *H. rubicundus*, *albipes* & *caeruleus*
 ♂♂ at 1.

Salix exaltatus ♀.

Glypta ceratites ♂, at 1 or 2? *G. longicauda* 1 ♂ at 2?

Lissonota bellator ♀ seen at 1. *L. errabunda* ♂♂ + ♀♀ (1?) on Wild barret at 2.

Aspilota ♂ at 2 on *Calluna* in bog. *Bombus* ♂ at 1.

Exetastes guttatus ♂ at 1 on *Heracleum*. *Banchus volutatorius* ♀
 (at 2).

Pezomachus ♀, very small, at 3?

28th July 1930. A wild day after a fine night. Heavy mist rain from 11 AM till 1 pm: afternoon with terrific showers & fine intervals but wind (SE-S) so strong that little is getting out.

2.30 till 4 pm. Sandhills at Kilgorman, Wx
Bombus terrestris ♂♂ & 1 fresh ♀ at *Carduus arvensis*.
B. lucorum ♂♂ & ♀♀. *B. agrorum* & *lapidarius* ♀♀.
Psithyrus barbatellus ♂.
Colletes picistigma a few seen.
Salix exaltata seen on Wild Carrot.
Paspalum plumbum & *Ceroplastes munitata* a few each seen.

About a dozen ichs taken by stream behind dunes.
Eristalis illucens ♂ & ♀. *Gremastus geminus* ♂.
Eristalis longipes ♂ & ♀.

Also a smallish *Pachyneurid* with dark legs & wings which I thought came from near Jack (West Limer) but was not at all like it! (AVS. Aug 1930)

28.7.30. 4.30 pm. A few specimens taken on carrot at railway bridge 1 mile S. of Inch station.
Athalia lineolata.

29th July 1930. Almost a wet day so frequent - were the heavy showers & though hot sun between them no collecting was possible.
 Took a fresh ♀ of *Bombus derhamellus* in brickfields behind "Merton", Ashdown, W1. on *Agrostis reptans*.

30th July 1930. A showery day, with fine hot sun between. With J. F. Perkins!
 Drove via Carrer to Kilcanny Bridge, Co. CW.; then to Scarawalsh Bridge & Glone sand pit, Co. WX; then home. Stopped beyond Cranford, to look for sawfly larvae but none seen. Two *Crabro* taken by J.F.P. on *Angelica*? *C. chrysostomus*.

12.30 - 3.30 PM. Kilcanny Bridge, Co. CW.

Bombus derhamellus 1 ♂.

Andrena rosae 1 very fresh ♂ (2nd brood) on *Carduus arvensis* at top of field N. of road, S. of bridge.

A. clunensis 1 fresh ♂. *A. coitana* ♀♀.

A. minutula ♂♂ (2nd brood)?

Halictus rubicundus, *calceatus*, *albipes*, *tumescens* ♂♂.

H. rubicundus, *villosus* ♀♀, also fresh *tumescens* ♀.

Psomoda rufipes ♂ & ♀.

30.7.30 cont. Kilearry Bridge, C.W. cont.

Crabro varius.

Salix exaltata ♂ taken, ♀♀ seen.

Myrmica schencki 1 ♀, running on path at usual place, with
M. ruginodis & rebrinodis.

Lasius fuliginosus ♂♂ & ♀♀ at nest, as usual.

Perithous divinator ♀. Leionota bellator 2 ♂♂ (1 a female).

4 pm. Scarra Island Bridge, G.W.

Colletes montanum. A few ♀♀, but no ♂♂, still about.

30.7.1930.

4.15 - 5.0 pm. Sandpit at Clonsilla, G.W.

Very little to be seen but common things!

Colletes danielesianus 1 very large worn ♂ at cliff.

Megachile 1 ♀ on Knopwood.

Myrmica melanoccephala ♀ seen enter burrows under small pebbles.

Pimpla brevicornis ♀.

Agathidium ♀

31st July 1930. A fine day, but mainly dull & cool E. breeze.

Brittas Bay, S. of Mizen Head, G.W. Sand-dunes.

Bombus terrestris a few ♂♂ on Sea Holly. B. lucorum ♂♂ & ♀♀.

B. jonellus ♂ faded (J.F.P.). B. hortorum seen. B. agrorum ♀♀.

B. muscorum ♂♂ & ♀♀.

Prithopus barbutellus ♂♂.

Colletes picistylus common.

Halictus rubicundus ♂♂.

Hyphaeus minutus ♀?

Odynerus 3. marginatus ♂ at Mizen Hd.

Pompilus rufipes very fresh ♂ & ♀ given to J.F.P.

" gibbus ♀ (?) (J.F.P.). P. plumbeus (abundant).

Tachysphex pectinifer several ♀♀. Ceropalus maculatus

Sphex luteus ♂ taken, ♀ seen by J.F.P.

Allantus cinctus 1

Tenthredo areolata frequent.

Large Carabid ♂ & ♀ taken in cop. Also odd specimens frequent.

Leionota parallela ♂♂ & ♀♀ common. L. connexa 1 ♂. Pimpla brevicornis ♀.

Perithous signatorius
Stenichneumon pictus 3 ♀.

Gremastus geminus ♂, ♀♀ seen.

1st Aug. 1930. As had a day in cross rain! Wind SE, E, to NE & heavy rain all day & next night. Down to meeting of the Vaters to collect larvae of sawfly seen previously on Hazel leaf, which S. Perkins thinks might be *Pteronidea melanoclypeata* (later R.C.P. said it could not be that! A.S.)

On 21st June 1931 an ich. emerged from one of above which seems to be a ♀ *Ecliptus proclerus*, Schmied., described in Opuscula p. 2559 from a ring 4 or 5.

2nd August 1930 Cleared about noon then wind swung round to SW-W.

12 noon till 4 pm. Sand dunes & cliffs at Arskintony, S. of Arklov Head, Co. WI. Some sun, heavy showers.

Bombus terrestris 1 faded ♂. *B. lucorum* ♀♀.

B. hortorum ♀♀. *B. muscorum* ♀♀ (2 only), *B. agrorum* ♀♀.

B. lapidarius ♀♀. *B. desertorum* several ♂♂.

Psithyrus rupestris 1 ♂.

Colletes succinea ♂♂ & ♀ very fresh (J.F.P.) *C. piceipes* ♀.

Hylaeus hyalinatus ♀.

Halictus rubicundus 1 ♀ seen. *H. calceatus*, *albipes*, *nitidusculus*

& *punctatissimus* ♂♂ on *S. auranti* & *Rap. port.* *H. villorum* ♀.

Salix exaltata ♂♂ & ♀. *Pompilus pictus* ♀.

Cerophora maculata.

Melinus arvensis.

2.8.30 cont. Arskintony cont.

Tenthredo arenata

About a dozen ichs. *Pimpla turionellae* 2 ♂♂, *P. flavicornis* 1 ♂, *P. debilis* ♂.

Glypta ceratites 1 ♀. *G. nigrotuberculata* (Lap. Lach.) 1 ♀.

Aerococcus maculatus, 1 large ♂. *Exetastes illudor* ♂.

Promethes ♂.

2.8.30. 4-30-5-30 pm. River side & railway, 1 mile W. of Arklov, Co. WI. (i.e. at "Bully Lane"). Very sunny.

Bombus lucorum, *agrorum*, *hortorum*, *lapidarius* ♀♀.

B. desertorum ♂ seen.

Psithyrus lachryllus ♂♂ common on *Vaccinium*.

Andrena dorsalis ♂♂ & ♀♀ common on *Rap. port.* & *Solidago*.

A. cincta ♀♀. *Psithyrus rufipes* ♀♀. *N. strabus* ♂♂ & ♀♀.

[*Megachile villaghiella* ♀ at 7-30 pm. on *Heath* leaf. George M. Stiller] taken

Salix exaltata ♀.

Gorytes mystecus ♀. given to J.F.P.

All specimens given to J.F.P.

3rd August 1930. A wet morning, with much misty rain or showers throughout the day; followed by a wet night. Some short sun bursts in afternoon.

Drove J.F.P. to Glendalough & walked to upper end of Upper Lake & back to P. Hotel. Discovered a fine looking gravel flat between Glendalough & Derry-Lawn House, which must be looked at next year.

1-30 till 4.0 pm. Valley below fall, Glenmaeuan, Co. WI.

River in great flood, full very fine; only some odd snails & very little out. Collected some larvae of *Pteronidea* on small bank of *Salix cinerea* x *aurita* (?) by river near swamp. Some only just hatched some still in egg.

Bombus agrorum, *muscorum*, *lucorum* & *lapidarius* ♀♀ seen.
Andrena tarsata 2♀♀ on *Angelica* in swamp.

Terthra perkinsi ? ♀.

Pimpla brevicornis ? ♀. *P. tunicellus* v. *flavicornis* ♂.

P. maculator small dark ♀. *Phytodietus* ♂.

Limonia bellator ♂♂ & ♀ seen

Tryphon, *Microplitis*, *Phaenocarpa*! *Tryphon* *deflectum*

Phaenocarpa *filicornis* *lucorum* ? a ♀?

Very common small *Phaenocarpa* on *Salix* & *Salix* *lucorum* & *lucorum*

[at 7 p.m. I took a ♀ *Proctotrupid* at *Salix* in old lane leading to Templemore graveyard, N. of Ferrybank!]

4th August 1930. A dull morning, turning fine about midday & a glorious afternoon (2 till 5 pm.) with a terrific storm between 5 & 6 on way home.

Drove via Debaty's Pass, & Garryduff X roads to Head of Devil's Glen, Co. WI.

11-15 AM. Stopped between Drumdangan & Ballydooling (W of Glencady) on way to Garryduff to look at willows for larvae but none seen.

11-30 - 12-30 Stopped at Garryduff X Road to collect sawfly larvae on willows (*S. cinerea* & ? *cinerea-aurita*). Several families very young & at least 3 kinds of *Pteronidea*
Pteronidea ferruginea

1.0 till 5.0 pm. Devil's Glen, WI. From above.

Bombus agrorum, *muscorum*, *lucorum*, *gignellus* ?

B. lucorum ♀♀. *B. lapidarius* ♀♀ also.

B. duhamellus 1 ♂ (George!). Also ♂♂ of *lucorum*, very yellow.

Psithyrus barbatus, frequent, ♂♂. *B. distinctus* ♂.

B. agrorum ? ♂♂.

Devil's Glen cont. 4.8.30.

Halictus rubicundus, *calceatus*, *albipes*, *tumalorum* ♂♂.

H. rubicundus & *villosum* ♀♀.

Hyloaema hyalinatus ♀.

Sphæroderus affinis ^{large} ♂. *Sph. affinis* ♂ (J.F.P.).

Mellinus arvensis ♂♂ & ♀♀

Crabro cetratus? one seen to enter burrow in log above
top of wood. *C. rapus*, 1 ♂ seen in Angelica in glen.

Odynerus 3-fasciatus? 1 seen at Ratus.

Ceropalus maculatus. A highly coloured ♂ on Angelica at top bridge over side glen.

Athalia

Tentredo perkinsi

Cladius pectinicornis ¹⁰ on ash in glen.

Many ichneumon in glen but mostly ♂♂ of *brachichneumon*,

amblytelus, *phaeon* & ? none of interest seen.

Glypta ceratites ♂ & ♀. *Leionota transversa*? ♀ with reddish abd.

Triclistus longicauda ♂.

Heterospelma calceator ♀

5th August 1930. A fine sunny day with soft SW
breeze & new depression approaching, at night.

Kilcavary Bridge, Co. ^{CW.} ~~FF.~~ With J.F. Perkins.

1. = Glen of the Glaskariff River, as before.

2. = ramp on left bank of Slaney above (200 yards)

Kilcavary Bridge, at foot of small tributary glen.

Bombus lucorum ♂♂ & ♀♀. *B. agrorum* ♀♀.

B. hortorum ♀♀. *B. lapidarius* ♀♀. *B. deshayesi* ♂♂ ^{1 or 2}.

Psithyrus barbutellus ♂♂ & several fine ♀♀.

Andrena minutula ♂ above corn field between roads; ♀♀
on path to north of 1 (J.F.P.)

A. denticalata several fresh ♀♀ on ragwort.

A. marginata, very fresh ♂ on *C. palustris* in marsh at 1.

A. rosae, 1 ♂ each & many ♀♀ on both sides of old
road west of bridge, on right bank of stream
at 1 & at 2. All on Angelica, except 1 ♀
on *Heracleum*; 1 ♀ on Angelica when disturbed
flew to flower head of Meadow Sweet & seemed
to feed in it.

A. coitana a few ♀♀ seen.

Halictus rubicundus & *tumalorum* ♂♂ & ♀♀.

H. villosulus ♀ at top of corn field.

H. calceatus & *albipes* ♂♂.

S. 8. 30 cont. Kilearry Bridge, CW cont.

Homada rufipes ♀ given to J. F. P.

Sphæroderes spp. a large series of ♂♂ on *Angelica* at 2
one small specimen ^{with} almost black abdomen. These seem
to be divisible in to *affinis*, ^{very} small *divinus* + middle-sized
divinus. No ♂ *Halicti* taken on flower heads with
them!

Crabro rufus ♂♂ + ♀♀ on *Angelica* at 1 + 2.

C. varius path to 1 (J. F. P.).

C. podapicus ♂♂ + ♀♀ common round *Angelica* at 1 + 2.

C. chrysostomus ♂♂ on *Angelica* at 2.

Mellinus arvensis abundant.

Pemphredon lethipes ♀ ? on *Angelica* at 2.

P. lapubris (J. F. P.).

Odynerus rufus at 1 + 2.

Verpa norvegica, *cybasteris*, *rufa* ? & *vulgaris* seen.

Chalcid on *Angelica* at 2.

Athalia

Selandria rufa ♂ at 2; also ♀♀ at 1 (J. F. P.)

Tenthredo arcuata 2 pairs in cop. taken + kept
ruficornis.

S. 8. 30 cont. Kilearry Bridge, CW cont.

Tenthredella atra ♀ on *Angelica* munching "Soldier Beetle"

Phyllotoma vagans ^{✓ RCLB.} ♂ on alder in marsh (J. F. P.)

Stenopogon lineata ♀ (J. F. P.).

Schneemon luteus ♂ on *Angelica* at 2.

Pimpla robusta "Korley". ♀ at 1.

Glypta "menurator" ♀♀ of *affinis* both forms, i.e. with normal
+ very long ovipositor. ? one or two ♂♂. ♀♀ with ^{normal} ^{different} ^{different}

G. lapidaria ?? ♂ with very elongate body

Leimona cylindrica ♂, " " " + red apices to segments.

Leimona *cybasteris* ♂, " " " + red apices to segments.

Leimona *cybasteris* ♂, " " " + red apices to segments.

Leimona *cybasteris* ♂, " " " + red apices to segments.

M. S. S. saw Red Admiral by path at 1.

6th August 1930. A fine day but not much sun till the afternoon, then too late. Strong S.W. wind, rising glass. Cahore, Co. WX. With J.F.P. & E. O'Mahony.

Bombus distinguendus ♂♂ & very fresh ♀♀ on head & in lanes.
B. terrestris ♂♂. *B. lucorum* ♂♂ & ♀♀. *B. agrorum* ♀♀.
B. deshayesi ^{*B. jonellus* ♂.} ♂♂. *B. muscorum* ♂♂ & ♀♀, very fresh.
B. lapidarius ♂♂ & ♀♀. *B. hortorum* ♂♂, ♀♀ & ♀♀.
Psithyrus campestris 2 black ♂♂ & 1 ♀; 1 pale ♂.
P. barbutellus ♂♂ & ♀♀ common; one very fresh ♂ has strong yellow band on tail!
Andrena gurguana 1 fresh ♂ & 2 ♂♂ brood in lane behind dunes.
Colletes montanus 2 ♀♀, very common, on *Carduus arvensis* & *Trifolium montanum*.
C. piceus ♂♂, common, & ♀♀, some very fresh.

Crabro vasmanti abundant. *C. rufus* 1 ♀ on *C. arvensis*.
Mellinus arvensis abundant.
Compilus rufipes 2 (Perkins). *C. plumbeus* abundant.
P. gibbus ♀ in lane behind dunes.
Ceropales maculatus abundant.
Tachygaster pectoratorius frequent.
Hedychridium ardens several.

6.8.30 cont. Cahore, WX. cont.

Oxybelus argentatus 1 ♂ on *C. arvensis* (seen & J.F.P.).
O. uniglutinus several.
Bethylus fusicornis ♀ (O'Mahony).

Tenthredo arenaria & *athalia* seen.
Callantus vicius ♂

Leucostoma parallelus ♂♂ & ♀♀ seen.
Glypta messorator 1 each typical ♀ & ♀ with long ovipositor, the latter 1 ♂ with considerable amount of red on abdomen & ? same sp.
Pimpla furcata ♀, very small.
Banchus rostratorius ♂ & ♀.
Cremastus geminus ♀.

Phaenocarpa ^{*nitidula* ♂} ♂♂ & ♀♀ seen. 1 ♂ of *Phaenocarpa* & 1 ♂ of *Phaenocarpa* seen.

7th August 1930. A fine day, after a dull morning but with strong SW-W winds. Storm & little sun till 3 pm. Drove via Shillelagh to Tullow, then via Mountbawn Bridge to Hacketstown & home via Tineahy. 70.5 miles.

~~12-30~~ Stopped for lunch

12-30 Stopped at ry. bridge 1 mile NE. of Tineahy station. Very good marsh full of horsetails & rushes for Solanus in May. Collected a few Attalus & 1 ich. Saw Tentredo arenata.

7.8.30 cont.

1.30 - 2.0 pm. Stopped on roadside 3/4 mile NW. of Shillelagh, Co. WI. Poor ground: nothing of importance seen.

7.8.30 cont.

2.30 - 3.0 pm. Stopped on roadside about 1 mile E. of Green River, Co. WI. Here plenty of Scabiosa arvensis & Knautia.

Bombus lucorum, lapidarius, muscorum, agrorum & terrestris (♂ only)

7.8.30 cont.

Halictus altipes & calceatus ♂♂ only.

No other aculeates seen!

T. arenatus abundant & variable: series taken (J.F.P.)

Several ichs: but mixed with rest lot.

7.8.30 cont.

3-15 pm. Roadside at Tullow ry. station = 1.

3-20 - 4-0 pm. Old sandpit 1 mile (?) SE of Tullow on road to Rathglass Bridge: = 2. All Co. CW.

4-15 - 5-0 pm. Old sandpit just E. of Mountbawn Bridge, nearly 4 miles N. of Tullow, Co. CW. = 3.

Bombus terrestris 1♂ at 2. B. lucorum common; one dwarf ♂ on Ragwort at 3 only signs of jonellus!

B. muscorum & agrorum common. B. denhamellus ♂♂ at 1, 2 & 3.

B. hortorum 1♀ at 3. B. distinguendus ♂♂ & ♀♀ at 1 & 2, rare, one very small worker at 2 (J.F.P.).

Psithyrus barbutellus ♂♂ at 1, 2, 3.

Halictus altipes & calceatus & laevis ♂♂ at 1, 2, 3. H. altipes fresh ♀♀ at 3.

Odynerus ♂ at 3 (J.F.P.)

Pemphredon shuckardi 1♀ on stump at 3.

P. lethifer 1♀ at 2 (J.F.P.) on Wild Carrot.

NB. These from 3 labelled Tullow (3), but those from 1 & 2 mostly labelled "Tullow".

7.8.30 cont. Tallow district cont.

No Yerspa seen.

Atteleia spp. & T. arcuata common.

Pimpla lucicola ♀ Glypta menstruator seen with long tubes ♀.

Bombus lucorum ♂ Eochus incidens ♂.

Glypta ♀ & Chorebus in lucorum.

8th August 1930. A dull day, with misty rain in late afternoon. Co. WI.

Drove to head of Glenmalur & collected about ford of Baranore & moraine from noon till 3 pm. Warm, little wind but only one or two glimpses of sun & very little out.

Bombus lucorum & agrorum a very few ♂♂. B. hortorum 1 ♀.

[Andrena pusilla not yet out!]

Halictus albipes (?). ♂(?) seen by J.F.P., ♀(?) seen by A.V.S.

Mellinus arvensis common.

Crabro palmipes ? 1 ♀ taken, others seen on bracken, at 1,000 ft. (J.F.P.)

Myrmica repens "nearby". ♂♂, ♀♀ (♂♂) seen.

Glypta elongator ♂ & ♀ on rushes in marsh.

G. bicornis v. rotundata ♂ in rushes with last.

8.8.30 cont. Baranore cont.

Several other spp. of ichs taken on Salix aurita by circular moraine.

Phytodietus ♀ Leucostictus constrictus ♂
Metacoelus flaviceps (? where taken: I don't remember: it might just possibly have come from the north! AWS).
Chelonus ♂ (? latrunculus Marshall).

Golerus aeneus 2 very metallic ♂♂ taken by J.F.P. on S. aurita at 700 ft. above circular moraine. (Apparently ♂♂ found.)

8.8.30 cont.

Drove over pass from Drumlogie to Aghernagh, Co. WI.

Collected ichs on Angelica just before Aghernagh & also in woods at Strangalia marsh in woods opposite Coolballintaggart, where J.F.P. took one ♂ Strangalia repens but rain coming on we had to leave.

Ichneumon ♂. J. ♀.

Glypta menstruator 2 ♀♀. Leucostictus tellator ♂ & ♀.

Leucostictus cylindricator ? 1 ♂, rather peculiar specimen!

9th August, 1930. A fine warm day, with sun in morning & afternoon, dull at midday.

R. Bann (left bank) from Bann Bridge to sandpit on railway at Clone (3 miles N. of Enniscorthy)

C.W.X. Noon till 4.30 pm.

Bombus agrorum on Carduus palustris & Knapweed in fields, along railway & in sandpit. ♂♂ & ♀♀ frequent.

B. lucorum ♂♂, ♀♀ & 1 fresh ♀. B. hortorum a few seen.

B. desertorum ♂♂ frequent. B. lapidarius ♂♂ & ♀♀.

B. agrorum abundant. B. muscorum frequent.

~~Rathfriland~~ B. distinguendus a few ♂♂ & large ♀♀.

Pistinus barbatus ♂♂ seen.

Colletes ♀♀ on carrot, Rosa latifolia, & Achillea millefolium in sand pit.

Andrena dentifrons 1 ♂, numerous ♀♀ on Knapweed.

A. cristata ♀♀ on Angelica, &c.

Sphex affinis & divisus ♂♂ & fresh ♀♀ on Wild Carrot on ry. by sand pit.

Halictus rubicundus ♂♂ & fresh ♀♀ very abundant.

H. calceatus, albipes & tumulosus ♂♂, scarce.

H. villorum ♀♀ in compact colony on "cliff" in sand pit.

Megachile centuncularis 1 very fresh ♀ on Knapweed. (A.W.S.)

1 ♂ & ♀ on Knapweed (J.F.P.): in sand pit.

9-8-30 cont. Clone cont. C.W.X.

Melissae arvensis abundant.

Crabro peltarius a few ♀♀ still at work in sand pit.

Aspilota tumida 2 ♀♀ near entrance to pit from ry.

as in 1927.

Myrmica melanoccephala 3 ♀♀, with red heads, with last.

Bethylus 2 very small ♀♀ (?) on "cliff" at

colony of H. villorum.

Odynerus parietum 1 ♀ in sand pit at Rosa latifolia.

Vespa rufa, uliginosa, norvegica & rubicincta ♀♀ & ♂♂ of last two.

Selandria cerna ♀♀ on Wild Carrot by ry. Athalia

Tenthredo areolaris. Allantus glabratus 1 ♂ on Wild Carrot.

About 20 ichs: many seen but not bothered about.

18th August 1930. A warm wet day! a few thick of sun about 3pm. mostly drizzling rain, very close.

Meeting of the Waters, Arreca, Co. WI. 11-30 till 4.0pm.

Left Park of Arreca for 1/2 mile above ry. bridge at Castle Howard gate, including big stump at bridge = 1.

Right bank along railway to 1st bridge over lane = 2.

Bombus lucorum ♂♂ & ♀♀. *B. lapidarius* ♂♂ & ♀♀.

B. desertorum ♂♂. *B. hortorum*. *B. agrorum* ♀♀.

Psithyrus barbatus ♂♂.

Andrena fuscipes ♂♂ very fresh flying over Calluna on ry. embankment above cutting, as in 192 at 2.

A. coarctata ♀♀.

Halictus rubicundus ♂♂, some, & ♀♀. *H. albipes* & *calceatus* ♂♂.

H. fuscipes 1 ♂ seen on Solihay at 1.

Nomada rufipes 2 ♀♀ at 2.

Colletes succincta ♂♂ very fresh with *A. fuscipes*.

Hylaeus confusus ♀ at 2 on Anemone.

Mellicope arvensis common.

Crabro leucostomus ♂ & ♀♀ nesting in stumps at 1.

C. prodepinus nesting in stump at 1.

C. chrysostomus ♀ on Anemone at 2.

10-8-30 cont. Meeting of the Waters cont.

Salandria terra ♀ seen. *Atkalia* & *Tenthredo arenata*.

Hoplismenus maurus? ♂ taken by J.F.P. on railway just above bridge at Castle Howard gate.

Pimpla inquisitor? ♀. *Glypta evanescens* ♂. *G. mensurator* ♀.

Phytodictus small ♀. *Schizopyga atra* ♂. *Perisoreus impressor* 1 ♀ on big stump at 1.

Strangalia aeneiventris. A large colony now exists in big stumps at 1 (J.F.P.). This being beech & much of the bark still being on many specimens had perished having failed to pierce the bark. Bark is very hard: some had cut through the bark undoubtedly & many made their escape. In places where there was no bark.

193.

11th August 1930. A dull day with some misty
showers, till 3pm, then fine & sunny, but too late.

Clara, Co. WI. Oakwood & sandflat = 1

Upper edge of oakwood along the moors = 2.

Bombus agrorum ♂♂ & two worn ♀♀ still working
at 2. *B. lucorum* ♂♂ & ♀♀. *B. muscorum* ♂♂ at 2.

Psithyrus barbutellus ♂♂ at 2.

Vespa spp.

No other aculeates seen!

Athalia lugens ♂. *Tenthredo arcuata* seen.

Pteronidea dispar ♂ taken in woods & small *Psithyrus* sp. seen
on oak leaf but none seen on sandflat.

Automalus albopunctatus taken by J. F. P.

Chloronotus 2 " " on *Vaccinium*

Mesochorus ♂ at 1.

Spilochus ♂ taken on birch trunk behind sand-
flat.

Mesochorus ♂ taken on sandflat

Pimpla ♂. *P. angustatus* ♂.

194.

12th August 1930. A stormy day with very strong
S.W. wind. Good sun at times.

11-30 - 1pm. Marsh, above Pennyconquits Bridge,
Enniscorthy, Co. WI. Also on Wild Carrot ♂ along roadside
N. of same bridge = 2.

Bombus lucorum ♂♂ & ♀♀. *B. lapidarius* ♂♂ & ♀♀.

B. agrorum ♀♀. *B. muscorum* ♂♂ & ♀♀. *B. desertorum* ♂♂.

Psithyrus distans 1 fresh ♀ on roadside on *Thymus*.

Colletes picistigma ♂♂ on wild carrot at 2

Halictus villorum ♀♀ at 2.

Chrysus ignita on carrot at 2.

Athalia very abundant.

Selandria morio ♀ & P.C.L.P.

Most ikes. collected in marsh; rest all on carrot at 2.

Pimpla ♂. *P. angustatus* ♂. *P. angustatus* ♂. *P. angustatus* ♂.

Pimpla ♂. *P. angustatus* ♂. *P. angustatus* ♂.

Pimpla ♂. *P. angustatus* ♂. *P. angustatus* ♂.

195.

12. 8. 30 cont.

1-30 till 4.0 pm. Deputy's Pass, Co. WI.

Windy but plenty of hot sun.

Bombus & : as before.Andrena mirabilis ♂. A. citreus com ♀♀ seen.Halictus rubicundus, coleratus, alpinus, pygmaeus ♂♂
H. punctatissimus 1 ♂ at top of garden. H. tumescens ♂♂. ^{almost fresh ♀}Sphærodera affinis & hyalinatus (1) ♂♂ at top of garden.Nomada sternifrons ♀♀.Trypoxylon clavatum 1 ♀ at usual stump in garden.Crabro variusMellicope arvensis[Sp. like ♀ Cerophala seen on trunk at top of garden]Salix enaltata ♂♂ & ♀♀.Cithelia & Tenthredo arvensis com.Lissonota depressor ♀ on stump in garden.Meniscus impressor ♀♀ on stump in garden.Automolus albipennis ♂ (J.F.C.).Schylone caerulea? ♀

196.

13th August 1930. Drizzling rain all day, heavy fall in glass & gale at night.

In aft. walked along coast N. of Kynoch's, Arklow, Co. WI. Saw nothing of interest except one or two Nematus sawfly on Wild Carrot just beyond 2nd point, but missed it!

14th August 1930. Gale continues, but a fine day & very much hot sun.

Milcanny Bridge, Co. WI.

Glen of Glashanagh River = 1.

Swamp at foot of stream on left bank, ^{of Slaney} 1/4 mile above bridge = 2.Bombus lucorum, agrorum, terrestris, terrestris ♂♂, terrestris seen.Psithyrus barbutellus ♂♂.Andrena rosae 3 ♂♂ (1 small, 2 large); & many ♀♀ seen on Angelica, some quite fresh & without pollen at 2.A. marginata ♂♂ & ♀♀ abundant on Scabiosa maritima at 2, ♂♂ also seen at each end of bridge.Sphærodera affinis 1 ♂ on Angelica at 2.Nomada argentata - atrata 1 ♀ flying low over path from river bank at bridge to marsh at 2. ? parasitic on A. marginata.
New to Ireland!N. rufipes ♀ at 1.Called at Kildavin sandpit on the way home but only took 2 ♀♀ of Pezomachus ♂ & ♀.

197.

14th August. 1930 cont. Kilcarrig cont. Co. CW.

Hydraea minutus 1 ♂ on Angelica at 2.*Halictus*, as before, but also *H. punctatissimus* & *H. villosulus* ♂♂.*Mellinus arvensis* abundant.*Crabro chrysostomus*, *vagus*, *varius* & *podagricus* seen at 2.*Odynerus sinuatus* seen on Angelica at 2.*Pompilus gibbus* ♀ on path at 1.*Athalia* & *Tenthredo arenata*.*Tenthredella atra* large ♀ on Angelica at 2.*Phyllotona vagans* ♀ on Alder. (J.F.P.) at 1.*Schizopogon atra* ♂♂ ♀ swept off small Alders in marsh at 1.*Pimpla detrita*? ♂.*Limona bellator* ♀ & another ♀ seen at 1. (J.F.P.)*Schizoloma capitata*? ♀ in care. (J.F.P.)*Ophion luteus* ♀ (J.F.P.)

198.

15th August 1930. Arklow Head & N. end of Ashtown Bay, Co. WI.

Bombus lucorum, *agrorum*, *muscorum*, *capitatorum*, *saxorum*, *deshamellae*, several ♂♂, *distigaudae* seen.*Colletes succinea* fresh ♂♂ & ♀♀: latter resting on clay cliff at S. side of Head.*Hydraea hyalinatus* 1 ♀ on *Crapi*.*H. minutus* ♀ on *Leontodon* at S. side of Head on shore.*Andrena pygmaea* ♂♂ & ♀♀, latter fresh, at foot of cliff.*Halictus rubicundus*, *albipes*, *punctatissimus* 1 ♂ on *Crapi*.*H. villosulus* ♀♀ very common & still working; also 1 ♂ on *Crapi*.*Salix exaltatus* ♀♀.*Pompilus gibbus* ♂♂ & ♀♀ on path up S. side of Head. One very large & one small ♀ seen fighting, rolling one each other like two boys but apparently not doing each other any harm.*Athalia* & *Tenthredo arenata**Pimpla eximinator* 1 very black ♀. *P. turionellae* seen.*Limona bellator* common. *L. variegata* ♀♀.*Glypta ceratita* ♀♀ seen. *G. menisurator* type ♀ & ♂ var. with long ovipositor ♀♀ frequent: ? ♂ of former taken.

15. 8. 30. Arkintery cont.

Pimpla brevicornis ♀♀ at Enia.

Pimpla resicaria var. ? 6000, 1♀ (others seen) on field carrot by field side on N. slope of Arklow Head (cf. ♀ taken at Enareilly on 12. 8. 30); not *brunnea* or *brevicornis*!

P. maculator small red ♀.

Ectaster guttatorius common on carrot.

Bombus volutatorius ♂. *Trichostus lateralis* ? ♂.

Red Admiral
very common
? very frequent
seen on
Carrots
Lentils

[J.F. Perkins left Arklow at 8.40 p.m.!]

16th August 1930. A glorious day, with no wind & much hot sun!

Returned to Kilcarrig Bridge, Co. CW. to look for more *Nomada argentata*. On arrival at 12-15 am I took a ♂ & then a ♀ on path from R. Slaney to marsh on left bank of Glashareigh River. A ♀ was taken on 14th Aug. Then searched *Scabiosa* where *Andrena marginata* ♀♀ were abundant, but no *Nomada* seen. Afterwards none seen on path though searched for several times, but after lunch 2 ♀♀ were taken along top of field above main road W. of bridge at gap into second field. Two ♀♀ *Andrena* (fresh)

16-8-30 cont. Kilcarrig, Co. CW, cont.

marginata seen at path where ♂ & ♀ taken, but none seen to arrive with pollen or to depart & not none seen at top of field across road. Therefore I think there must be some other nesting site for *marginata* & if this could be located the *Nomada* might be found in plenty, as the *Andrena* is so abundant. Also as all the specimens of the *Nomada* are so fresh, it seems likely that more would be seen a few days later.

List of spp. seen or taken. *Bombus terrestris* fresh ♀ in marsh. *Bombus* as before, but add *B. jonellus* ♀ on *Calluna*. *Andrena marginata* abundant on *Scabiosa nicaea* in marsh & 2 ♀♀ seen about burrows along path from River Slaney; ♂♂ practically disappeared already! *A. coitana* ♀♀ on *Scabiosa nicaea* & other flowers. *A. denticulata* ♀♀ on *Knopweed*, ♂: at top of field above road.

A. minutula ♂ on path through gorse between marsh & Slaney. *Halicti* as before

Sphex *divinus* ♀ seen on path.

Nomada argentata. ♂ & ♀ on path, 2 ♀♀ at top of field across road. See notes above.

N. rufipes. ♂ & ♀ at end of path next Slaney.

16-8-30 cont. Kileasoy, Co. CW. cont.

No other aculeates of interest seen, except *Myrmica ecleancki* ♂♂ as usual.
Am. testaceipes ♂ & ♀ taken on path.

Leucocryptus ♂ ?

Proctosynaldis laminatorius a ♂ in wet upper end of marsh amongst mint, with wings so frayed that it seemed disinclined to attempt flight.

Stelidota ♂ ♀ on mint in marsh at same place.

Stenobothrus ♂

Glypta ♂ & ♀

Tryphon

Schizoloma capitata ? ♀.

16-8-30. 3-30-4-0 pm. Stopped at several places between Coolatin & Tineahely, Co. WI.

There much likely ground but nothing strong seen.

At a bank in field were many ♂♂ of common *Halictus* (*rubicundus*, *calceatus* ♂) & here one ♀ *Sphex* was taken.

17th August 1930. Drizzling rain all day: did nothing!

18th August 1930. Left Arklow at noon & drove home, arriving 1-45 pm. First morning, cool at Arklow, very hot in Dublin; turning train in aft. & terrifi downpour in evening & night!
 END OF ARKLOW TRIP. on Braconid taken in Dublin!

19th August 1930. A fine day, but strong S. wind & heavy showers in middle of the day.

11-30 till 1-0 pm. Sand-pit at Knockanure, see as before.

Bombus lapidarius ♂♂ & ♀♀. *B. lucorum* 1 or 2 ♀♀ only seen.

B. muscorum several pale ♂♂. *B. agrorum* ♂♂ (pale) & ♀♀.

Bithynus ruficornis 1 ♂ taken by George. *B. barbutellus* ♂ seen.

Halictus albipes & *rubicundus* ♂♂ seen.

Nomada sp.? A large ♀ twice seen, black & yellow with red legs: looked like *N. marshmulli* or even more like

N. foveolaria. Very rare & heavy showers prevented me seeing it again. As a ♂ was taken at Portlaine, Co. DU. by J.F. Perkins on 23.8.35 this ♀ was no doubt *N. foveolaria* as I felt sure at the time. A.W.S. Aug. 1935.

Chrysothorax ♂♂. *C. chrysostomus* ♀♀ & ♂ seen.

C. leucostomus ? seen. *C. ruficornis* ? ♀

Pemphredon rhubarbari ♂♂ & ♀♀.

19/8/30 cont. Knockmaroon cont. Co. DU.

Vespa vulgaris ♀♀ abundant about Coltoport, &c.

Athalia & Tenthredo arcuata frequent.

~~Phaenocarpa~~ ^{Athalia} 1 ♀ taken on car in Phoenix Park on return journey. = Pristiphora pallidivittis yellow form ♀♀ (? n sp.)! RCLB.

Glypta hiovnis var. retracta 2 ♀♀ on Pimpinella.

24th August 1930. A fine day, but rather windy, after a week of rain & heavy rain.

Porruscourt-deerpark, Co. WI. 11.0 AM till 1 PM.

All taken within 1/4 mile of gate & on right bank of river, in "the hollow of the logs".

Bombus agrorum 1 or 2 workers only.

Prithyrus barbutellus 1 ♂.

Halictus rubicundus fresh ♂♂ & ♀♀. H. calceatus ♂♂.

H. alpestris & freycenianus ♂♂ (+ ? ♀♀ of both spp.).

24.8.30 cont. Porruscourt-deerpark cont.

Halictus tumulorum ♂♂ & ♀♀. H. leucopus ♂♂

All on Ragwort!

Sphex moniliicornis ♂♂ & 1 fresh ♀ on Ragwort by road above hollow & close to the "Horse-Shoe Pit".

Nomada marshamella 2- brood! 3 ♂♂ on Ragwort.

Mellinus arvensis abundant.

Crabro sp.? 1 seen on Trypoxylon log.

Athalia & Tenthredo arcuata. 1 ♂ of latter taken.

Lissonota variabilis 1 ♀ on log. L. bellator ♂♂ abundant & all flying about rushes &c in swamp.

Stenichneumon calceator 2 ♀♀, others seen, on Carduus arvensis, in marsh.

Colpognathus calceator ♂ & many ♀♀ seen on C. arvensis in marsh.

25th Aug. 1930. Evening! Garden at 14 Clareville Rd.

Harold's Cross, Co. DU. AWS.

Stenichneumon calceator ♀. Chistopyga incitator ♀. Pimpla calceator ♂.

26th August 1930. A very hot day, mostly sunny but very windy in aft. (SW wind).

Afternoon 2-30 till 4-30 pm.

Sand pit by the highway at Knocknarrow, Co. Du.
as before. Too windy for collecting! 2-30-3-30.

Bombus lucorum, agrorum, lapidarius + muscorum 7/8

Prithyrum rupestre + Corallorhiza 10 each on Section.

Salic. as before.

Phacodes ~~vag.~~ monilicornis ♂♂ + ♀♀ very fine + fresh,
on Carduus arvensis flowers in field W. of pit.

Komada marshamella 3 ♂♂ (2 - hood).

Crabro chrysostomus + leucostomus ♀♀ seen.

Scaphiopus shufhardi common.

~~Microstigma~~ *Glypta bicornis* var. rostrata 4 with red segment

26/8/30 cont. Lucan demersum sandpit; G. G. S. etc.
Very hot sun & good shelter in sandpit, but
overcast Sixtowns. G. Barnett. 4-30 pm
no Recd. Aug. 1930. further.

Born 1st box. Andrena clarkella, 1♀.

Butt
Halictus albifrons, 21 ♂♂.

Hal on app. in before.

Shes 2nd box. *C. arvensis* Hovm.

S. ap. Andrena jucata 1♂, 2♀♀.

Nom *G. saundersella* ♀.

7 *G. subopaca* 3♀♀?

Q. coccinea ♂♂, ♀♀ common.

G. tarsata 5 ♀♀.

16 *Halictus calceatus* 1 ♀.

♂ *H. albipes*, ♀.

Romada inficornis ♀.

Crabro *arv.* (or *palanipes*) 1 ♀.

Dolius aeneus ? ♂ & ♀.

26/8/30. A crowy ~~over~~ⁱⁿ ~~nest~~^{at Mayfield}
 & nest-worming a ♀ Hemiteles ^{Austrian} ~~on shelf~~
 in bathroom.

Ovenreagh Siltown. G. Barnett.

Recd. Aug. 1930.

1st box. Andrena clarkella, 1 ♀.

Halictus albipes, 21 ♂♂.

2nd box.

Andrena fucata 1 ♂, 2 ♀♀.

A. saundersella 1 ♀.

A. subopaca 3 ♀♀ ?

A. cortana ♂♂ + ♀♀ common. ♂♂ ♀

A. tarsata 5 ♀♀. ♀

Halictus calceatus 1 ♀.

H. albipes 1 ♀.

Nomada ruficornis 1 ♀. ♀

Crabro varius (or palanipes) 1 ♀.

Dolerus aeneus ? ♂ + ♀. ♂♂ ♀

26th August 1930. A very hot day, mostly sunny but very windy in aft. (SW wind).

Afternoon 2-30 till 4-30 pm.

Sand pit by the bluff at Knokkenaroon, Co. Du.
as before. Too windy for collecting! 2-30-3-30.

27

Prithyrum superbum & lobatella 10 each on Section.

Salicaria as before.

Phacodes ~~vag.~~ monilicornis ♂♂ + ♀♀ very fine + fresh,
on Carduus arvensis flowers in field W. of pit.

Nomada marshamella 3 ♂♂ (2 = hood).

Crabro chrysostomus & leucostomus ♀♀ sem.

Scaphiopus shufhardi common.

~~Missouri~~ *Glypta bicornis* var. rostrata 4 with red segments

26/8/30 cont. Lucan demersum sandpit; Co. Dub. till
Very hot sun & good shelter in sandpit, but ⁴⁻³⁰ pm
not much out after previous weeks' bad weather.

Bombay: nothing of interest seen.

Butorina rufescens 2 ♂♂.

Halictus nitiduscula ♂ & other common spp. & before.

Rhacoma moniliaria ♂♂ frequent - on *C. arvensis* Horv.

S. affinis ♂

Nomada marshamella, Carg. ♂.

Tenthredo arcuata

Melanichneumon rayninator ♀♀ on C. arvensis & many
other ich. also including Colpognathus celestus ♀♀

Stenidneumon culpatior Phyllophorus ♀

26/8/30. In evening took small Anomaliid in garden, at Mayfield
 & next morning a ♀ Hemiteles ^{avator} ~~hirsuta~~ on shelf
 in Lathroom.

Portrane, Co. DU.

31st August 1930. A beautiful sunny day, after a wet one: cool NE breeze rather affected collecting in the dunes in afternoon. Not much out.

11-30 till 2-30. Cliffs &c from S. Martello Tower to Portrane
Anthem = 1.

2-30 till 4-30. Dunes 1/2 mile S. of Martello Tower = 2

Bombus lapidarius ♂♂ & ♀♀. *B. agrorum* (♂♂?) ♀♀.

B. nigrorum a very worn specimen (? a small ♀ or a very a large ♀), very faded with no trace of orange in tail. So far as I know this is the first specimen taken in Co. Dublin. [No *B. lucorum* seen!]

Prithyrus distinctus 1 ♂ seen.

Halictus rubicundus 1 fresh ♀. *H. calceatus* & *albipes* ♂♂.

H. tumulorum ♂♂. *H. leucopus* ♂ & ♀ all at 1.

H. "meathmanellus" Irish form. 6 ♂♂, 1 fresh ♀ & 1 faded ♀ at 1.

Sphucodes affinis? ♂ & ♀ at 1.

Pompilus rufipes 1 fresh ♂ at Martello Tower on coast.

Pompilus gilvus, *P. plumbeus* & *Tachysphex pectinipes* seen.

Odynerus 3-marginatus ♂♂ & ♀ at 1.

Bothriphys fuscicornis ♀ at 2.

Phaenocarpa ruficornis? ♀ on coast at 1.

Phaenocarpa ♂♂ at 1.

31-8-1930 cont. Portrane, Co. DU. cont.

Glypta bicornis var. *rostrata* ♀ at 1 on coast.

Leiometa bellator ♂♂ & ♀♀ seen. *Leiometa* ♂♂ at 1.

L. cf. curvicauda? ♀ at 2. *Leiometa* ♂♂ at 1.

Pimpla ⁴ ♀♀, small, varying from *spuria* towards *arctica* at 1.

P. hirsuta ♀ at 1. *Bombus*, *muscorum* ♂♂ at 1.

Euclyptus ♂♂ small ♀ at 1. *Homocidus* ♀ at 1. *Proctos* ♂♂ at 1.

Theridion ♀ at 1. *Phaenocarpa* ♂♂ at 1. *Phaenocarpa* ♂♂ at 1.

Sphucodes *vicinus* ♂♂ common at 1.

1st Sept. 1930, aft. S. of Bray Head, Co. WI.

A fine sunny day in Dublin, but mist over hills extended to Bray Head & hid sun. E. wind.

Worked from Wind Gate to sea near Ball's Rock in search of *Halictus meathmanellus*, a ♀ of which taken by old ry. there on 25.9.21 seems to be the true English *meathmanellus*.

Bombus agrorum ♂♂ & ♀♀, *B. lapidarius* ♂♂ & ♀♀, both spp. common.

B. pratorum 1 ♂ on Erica. *B. muscorum* a few faded (♂♂?).

Halictus calceatus & *albipes* a few ♂♂ seen. *Halictus* ♂♂ at 1.

Glypta ceratites ♀. *Mesochorus* ♂.

Lasius ♂♂? ♂♂ & ♀♀ on hill by old ry. *Phaenocarpa* ♂♂ at 1.

7th Sept. 1930. A dull stormy morning, turning fine about mid day with much sun in afternoon, after bad weather for two days before. Drove to Athy, then south past Ardree mill to overgrown sand pit in angle of road SE of Farmhill where collected for a ~~short~~ ^{three} hours. Then to railway bridge at Spring Lodge, 2 1/2 miles S. of Athy where in triangular field W. of wood are good banks round field for bees. Then via Kilkea & Belan Ho. (both on Green R.) to sand pit on old road 1 1/4 miles S. of Ballitore & just S. of Willowbrook Ho. All in Co. KD.

11.30 till 2.30. Overgrown sand pit S. of Ardree & Farmhill, 2 miles S. of Athy, Co. KD. = "Athy (1)"

Bombus lucorum nest still working. *B. agrorum* ♂♂ & ♀♀.

B. muscorum a few ♂♂. *B. lapidarius* ♂♂ & ♀♀.

B. derhamellus 1 ♂.

Psithyrus campestris dark ♂♂. *P. rupestris* ♂♂.

P. distinctus 1 ♂.

Halictus lativentris 1 fresh, large, ♂ on *Sonchus oleraceus* flower at N. end of field. *H. albipes* & *calceatus* ♂♂. *Crabro chrysocoma* ♀ at stump in marsh opposite pit.

7.9.30 cont. "N. Athy (1)" cont.

Limonia mellinipes ♂. *T. eximius* & *Black* ♀. *D. praeceptor*.

P. phaeonellus ♀. *Euphranta* *caerulea* var ♂.

Theridion 2 spp.

7.9.30 cont.

2.30 till 3.0 pm. Field E. of ry. bridge (& W. of wood) at Spring Lodge, 2 1/2 miles S. of Athy, Co. KD. = "Athy (2)"

Bombus spp. as at 1. Also *Psithyrus* spp. same as at 1.

Halictus ruficinctus ♂♂ & fresh ♀♀. *H. albipes* & *calceatus* ♂♂.

H. lativentris 1 ♂ on ragweed at E. side of field next wood.

H. tumalorum ♂♂ seen. *H. nitidus* 1 ♂.

Sphex (sp.?) 1 ♂.

Mellinus arvensis ♂♂ & ♀♀.

Crabro varius ♀.

Athalia lineolata & *Tenthredo arcuata* seen.

Pimpla instigator small ♀.

Dyspota praecipua.

Very good ground
& wood should pay
working!

7.9.30 cont. 4.0 till 5.0 pm.

Small sand pit & field of *Scabiosa succisa*
S. of Willorbrook, 1 1/4 miles S. of Ballitore by
the old road, Co. KD.

Bombus lucorum ^{1♀} ₄ *agrorum* *terrestris* & *lapidarius*
Psithyrus niger ♂♂. ♂♂ & ♀♀ seen.

Andrena minutula 1♀ 2 = brood in sand pit.

A. marginata 1 very dark ♀, not very fresh, on *Scabiosa*
in field.

Halictus rubicundus & *calceatus* ♂♂ seen.

Sphex monilicornis 1♀ in pit, ♂ seen.

Mellinus arvensis ♀♀.

Crabro varius ♀ in sand-pit.

Pezomachus *prostratus*? ♀ in sand-pit.

(i. distinct well
with working!)

10th Sept. 1930. A fine day, but rather dull in
afternoon, owing to S.E. wind & misty clouds on hills.
Powerscourt demesne, Co. WI. Almost all specimens
taken on one oak tree on top of right bank of river
about 300 yards below the deerpark gate (the same
place as collected in on 13/9/29!).

10.9.30 cont. Powerscourt demesne, cont.

Bombus agrorum a few only seen.

Vespa vulgaris ♀♀ common.

Halictus albipes ♂♂ seen. *Bethylus pumilio* on oak.

Crabro chrysostomus 1♀ seen. *C. varius* ♂ & ♀ at oak.

Mellinus arvensis ♂♂ & ♀♀ at oak, rare.

Athalia lineolata ♂♂ & ♀♀ on oak.

Tenthredo uncinata seen on angelica.

Emphytus serotinus 1♂ at oak.

Pimpla ruficornis ♀♀.

P. maculator ♀.

Phaenocarpa pallipes 1♀ on oak.

Acrodactylus *degeeri*? 1♂ on oak.

Homocidus *trifidus*? ♂♂ on oak.

Gyrinus *flavus* *trifidus*?

The small *Proctos* in oak on Powerscourt Hill.

= *Gyrinus* *flavus* *trifidus*?

14th Sept. 1930. A fine day; after a very wet one:
a good deal of sun & very little wind (N.).
Valley of the Rye Water at ^{Kellytown} ~~Ballykelly~~ bridge, E. of Barton
Co. KD = 1; and small quarry 1 mile E. of Kellytown
at Shaughlin's Well, also Co. KD.

Bombus agrorum a few faded ♀♀ & ♂♂ at 1 & 2.

Halictus "maerthmanellus" (Irish form). A few ♂♂ & many
♀♀ (some fresh & some 1929 (hibernated) & very worn, on
Leontodon, *Hypochaeris*, *Taraxacum* & *Sonchus oleraceus* flowers
on Sandford Bridge, in field & bank E. of bridge on right
bank of river & nesting in sand pit 100 yards N.E. of the
bridge on left bank of river. Practically the only *Halictus*
seen on rt. bank of river.

H. rubicundus ♂♂ & ♀♀ in sand pit at 1.

H. calceatus a few ♂♂ seen at 1.

H. tumulorum ♂♂ & ♀♀ seen at 2.

Athalia lineolata at 1 & 2.

Mesochorus ♂ at 2: the only ichneumon seen!!!

Sphex *terrestris* ♂ & ♀ at 1 & 2.

17th Sept. 1930. A dull day, mild, with SE-E
wind, before depression & terrific rainy night.

Sand pit on road N. of Sallins, Co. KD. = 1

sand pit on railway at same place = 2.

Much *Scabiosa* in latter place & very good
ground if only one could get a good day.

Bombus lapidarius a few ♂♂. [no ♀♀ seen!]

B. lucorum a few ♂♂. *B. muscorum* a few ♂♂.

B. agrorum abundant - ♂♂, ♀♀, & ♀♀ seen on *Vicia*
repens flowers at 1 & on *Scabiosa* at 2.

Psithyrus rupestris several ♂♂. *P. bartollettus* 1 ♂.

P. campestris 1 dark ♂ at 2. ["Bumble" nearly all at 2]

Halictus rubicundus, & *albipes* a couple of ♂♂ of each at 2.

No other aculeates seen!

Lissonota communis ♂♂ (^{*L. cylindricornis* ♀} at 1 & 2) on carrot at 1.

Toryphon elongatus at 1 (not taken!).

Homocidus tarsatorius ♂♂ (& other small spp. & Braconids all on thistle, at 1) ^{very} common.

H. nigritarsus ♂ & ♀.

Attractodes *truncatus* ♂. *Orthocentrus* ♂. *M. yellow* ♂.

21st Sept. 1930. 10-30 till 12-30 noon. A fine sunny morning, but very windy with rising glass after much terrific rain.

Portsmouth - demesne, Co. WI. Just below deerpark gate on right bank of river. Most collected at top of river bank amongst nettles, grass, docks &c (=1) or at first oak tree on top of right bank nearly opposite Valchura Ho. gate (=2).

Bombus agrorum & *Vespa vulgaris*. one or two of each seen.

Emphytus ^{serotinus} ~~serotinus~~ ♂♂ very common at oak at 2.

Athalia lineolata seen.

Polyphincta multicolor ♀ on oak at 2.

Pimpla maculator ♀ at 1. *P. flavicornis* ♂. *P. v-dentata* ♀.

Promethes pulchellus ♂ & ♀ at 1. *Picrostigeus recticauda* ♀?

Oleniscus gnathoxanthus ♀ (?) 4.

24th Sept. 1930 aft. 2.30-4.0 pm. A fine day with much sun though windy & some showers. W wind.

Glenasmole, Co. DU. Everything collected about Brady's house, either in the old garden⁽⁼¹⁾ (a few only) or at flower of *Phytolacca sagahliensis* near "the siens" (=2).

Bombus agrorum several seen at *Scabiosa succisa* 2.

Mellinus arvensis ♀♀ at 2.

Pimpla (*Trox*) *elegans* ♂ at 2.

Pimpla v-dentata 3 ♂♂, 1 ♀ at 2. *P. tarsinellae* ♂ at 2.

P. maculator ♀ at 2. *Lissonota sulphurifera* ? ♂.

Mesoleius (*Lagarctus*) *semicaligatus* ? ♂ at 1. *Exochus pictus* ♀?

Coelinius ♂ at 1. at house

Promethes ^{sulcator} ~~albicornis~~ 5 ♂♂ at 2. *P. pulchellus* 1 ♂ at 2.

Attracted to *Phytolacca* 3 seen

28th Sept. 1930. A fine day after a couple of dull & cold ones, wind N. but considerably sun.

11.30 till 2.30 pm. Ballyhenry quarry, Co. WI.

Bombus agrorum a few ♂♂ & ♀♀.

B. lapidarius 1♂ reported by George & Hugh.

Halictus calcatus 1♂ seen.

Vespa vulgaris a few ♀♀ seen.

About a dozen ichs & Braconids taken including
Diabornus lituratus on alder.

Caliope annulipes 1♀ em. 11.5.31: Larva probably on *Salix*! RCLP.

Phaenocarpa picipennis & *N. luteus*, em. May-June 1931. ✓ RCLP.

Used Beignell beating tray for first time & brought home a couple of dozen sawfly larvae including:-

C. varus ✓ RCLP. 2 or 3 on alder: green with black dots: 1♀ em. 23.4.31.

Platycampus luridimaculatus ✓ RCLP. flat, green, with black paired dots, on alder. Em. May-June 1931.

On Alder (one of the alder) = *Phaenocarpa* sp. as above, ✓ RCLP.

Platy sp. on *Salix* & alder. See below, 30.

On Alder with a bit of sawfly on it. ✓ RCLP.

Small green sp. on Alder & *Salix*. = *Pteronidea* sp. n. Irish v. RCLP. 10♂ em. 9.5.31. = *fuscicornis* Benson, 1934.

In March 1936 R.B. Benson spread that the first ♀♀ named after him by R.C.L.P. were recorded in Britain by Benson in E.M.M. Nov. 1935. AWS.

28.9.30 cont. 3 till 5 pm.

Ballyhenry, Co. WI.

A few spp. of ichs & Braconids taken: mostly at oak in field at top of road lane.

Two sawfly larvae taken from *Salix* & *Berich*: the former green with pink stripes on back, the latter all green & injured.

x = *Pteronidea* *maculipes* probably, see below, 2nd of 2/1/32.

1st Oct. 1930. A dry dull, foggy, afternoon. E. breeze.

3.0 till 5.0 pm. Slade Brook, Upper Glenasmole, Co. DU. 700-900ft.

Spent the afternoon beating *Salix aurita* & *cinerea* bushes, birch &c. for sawfly larvae. About 7 or 8 spp. taken (only a few of each caught).

a lot (2 series) of *Pteronidea* * : green with small black spots & yellowish head & tail. Many small & few larger ichs. &c.

beaten into tray & captured with fingers: - *Pteronidea melanops* v. *maculipes* 1♀ em. 2.5.31 ✓ RCLP.

Pontania leucosticta ♀ ✓ R.B. Benson.

Stenomacrus *maculipes*? ♀♀, slender & small. ✓ RCLP.

Phaenocarpa *luteicornis* 10. H. *collinus* Stelfox, co type, ♀ AWS. 1940. *Orthocentrus* *fulvipes* 6♀.

* 1♀ found & returned from England on 25/4/1932. O. sp. 1♂.

Pot A

II

v. Belmont II., Wanderers II. v.

March.
Old Semi-final.
Old Final.
April.

"B" Division.

October.

II v. Wheatfield, Ophir v. Hyde-
III. v. Civil Service, Edgehill v.

Cliftonville III., Wheatfield v.
rvice v. Ophir, Albert Foundry v.

III. v. Civil Service, East Antrim
Ophir v. Albert Foundry, Edgehill

v. Edgehill, Wheatfield v. Ophir,
Antrim III., Civil Service v. Albert

November.

v. Cliftonville III., Hyde-
v. East Antrim III., Edgehill v.

II. v. Cliftonville III., Wheatfield
Edgehill v. Ophir, Civil Service

II. v. Ophir, Wheatfield v. Civil
dry v. Hyde-
v. Edgehill v. East

December.

v. Hyde-
il Service, East Antrim III. v.

v. Cliftonville III., Wheatfield
Albert Foundry v. Ophir, Hyde-

Cliftonville III., Ophir v. Wheat-
II. v. Hyde-
v. Albert Foundry

January.

II. v. Albert Foundry, Wheatfield
Antrim III. v. Ophir, Civil Service

II. v. East Antrim III., Albert
field, Ophir v. Edgehill, Hyde-
v. Hyde-
v. Hyde-
v. Hyde-

Cliftonville III., Civil Service v.
rk v. Albert Foundry, East Antrim

Old—First Round.

February.

Second Round.

Third Round.

Cliftonville III., Hyde-
v. East Antrim III., Albert

March.

ULSTER EGG-LAYING TEST

Period 16th October, 1929, to
16th September, 1930.

THE FINAL FIGURES.

The results of the egg-laying test (pullets) from the 16th October last to the 16th September, when the final period of four weeks ended, have just been issued by the Northern Ireland Ministry of Agriculture. The figures given below, the report states, are subject to alteration when the records are finally checked. An announcement regarding the awards of prizes and certificates will be made in due course. The next Test will commence on 15th October, 1930.

The following table gives the names of owners of pens, and the number of eggs laid by each pen:—

Section 1—White Wyandottes (31 pens)—Mrs. Porter-Porter, Belle Isle, Lisbellaw, 1,296 eggs, value £10 13s 2.09d; Mrs. Andrews, Ballymacconnell, Bangor, 1,301; Mr. T. B. Brown, Donaconey, Lurgan, 1,230; Miss Finlay, Glencairn, Clandeboye, 1,279; Mr. D. M'Intyre, Gas Works House, Dungannon, 1,347; Mrs. Darley, Trory, Ballinamallard, 1,163; Mrs. Pringle, Moor Farm, Ballygawley, 1,267; Mrs. Loughrin, Mackney, Cookstown, 1,292; Mrs. Warnock, Rathgael, Bangor, 1,188; Miss R. B. M'Cormick, Brookend House, Stewartstown, 1,194; Mr. Lindsay, Hollygrove, Ballyhinney, Newtownards, 1,191; Mr. M'Cann, Drum-keeragh, Ballynahinch, 1,196; *Mr. J. Heron, Ardigon House, Killyleagh, 1,342; *Mr. M'Master, Charlotte Street, Ballymoney, 1,288; Miss S. J. Moore, Ballynacannon, Macosquin, Coleraine, 1,233; Lady Dunleath, Ballywalter, 1,157; *Mrs. R. Baird, Kilbright, Grey-abbey, 1,193; Mrs. J. Boyd, Northfield, Donaghadee, 1,041; Mr. A. R. Jackson, Portmuck, Islandmagee, 1,169; Miss M. Shields, Altmore, Pomeroy, 1,103; Mr. J. M'Ilroy, Drumnaquoile, Castlewella, 962; Mrs. J. Jamison, Newcastle Road, Castlewella, 1,128; Mr. W. R. Stewart, Skilganaban, Ballyclare, 1,078; Mr. W. Hall, Drumnacairn Poultry Farm, Lurgan, 1,017; Mr. H. Shaw, Mullaghmore Cottage, Green-island, 1,096; Mr. W. Denvir, Castlebuoy, Portaferry, 1,019; Mrs. M. A. Barnett, Ballagh, Clogher, 852; S. M'Murray, Cappy House, Banbridge, 821; M'Neill, Drain's Bay, Larne, 826; Capt. C. M'Veery House, Killyleagh, 846; Mr. W. Ballymena, 492.

(20 pens)—Capt. C.

MOTORING.

Motor Notes by "Verax" appear
every SATURDAY in THE

Belfast News-Letter

ORDER YOUR COPY TO-DAY.

Latest From London

By Private Wire.

London Office—180, Fleet Street, E.C.4.

Telephone Number—Holborn 3321.

Tuesday Morning, 5 o'clock.

THE CADET CORPS

Will Live Despite "Government's Effort to Kill Them."

The "Morning Post" says:—The Cadet Corps, although the Government has attempted to kill them, are not to be allowed to die. A new organisation has been formed, as our military correspondent reports, to continue the good work. Lord Allenby, never slack in the public service, is to be the head of a strong Federal Council. The organisation is on a territorial basis, each cadet battalion being under the charge of its county committee, over which the Lord Lieutenant of the county concerned will preside. Thus a movement which encourages patriotism and service in our youth will be maintained in spite of official neglect and political hostility. The pacifist and the little Englander still persist in the fallacy that disarmament secures peace, and that by turning the British Lion into a British sheep all danger of war may be avoided. They were preaching exactly the opposite on the very eve

TWO DAY

HOUSEHOLD

PIANOS, STECK PIANOLA PIANOS,
WOOLLEN KNEE RUGS,
FITTINGS, AND

IN THE MART, 38
On WEDNESDAY

Commence

VERY FINE UPRIGHT
"Steck" Pianola Piano,
American Organ; 10-stop Organ
and Portable Gramophones; Electric
Cinematograph Machine; Ten
and Rexine; Odd Chesterfield
in crimson plush; Twelve Odd
Oak Drawing-room Settees; Ten
and Rocking Chairs; Inlaid Mahogany
China Cabinets; Mahogany
Rosewood Music Cabinet; Mahogany
Mantel Clocks; Brass and Oxidised
and oak; Mahogany Dinner Table
and Walnut Telescopic Dining
Fine Walnut Billiards-Dining
Dining Suites; Odd Couches and
case Top; Twenty Overmantel
Chairs; Grandfather Clock, in
in walnut, burr-walnut, oak,
Wardrobe; Ten Odd Wardrobes
Beds, in walnut, burr-walnut,
Couch; Bed Chair; Cambray
gany, and deal; Twenty

5th Oct. 1930. A fine morning, but very windy.
Beating for sawfly larvae on Salix, & in
Lanskerney Marsh (=1), Kilmacange Marsh (=2)
& The Quill Channel Marsh (=3), Co. WI
10-30 till 12-30 noon. In Museum in aff.

At-1. I took three green larvae with pink dorsal
stripes: ? *Phaenocarpa* *antipodum*, also 1 or 2 deep
green larvae which escaped? All on Salix.

At-2. One deep green with pinkish tint & 1 dull
green with minute spots, latter very small. Salix.

At-3. on Birch: 3 or 4 pale green spatulate larvae.
One small ich. beaten out of Salix at 2.

& 1 large *Aromated* seen on Angelica but missed
at 1.

[One small sp. taken in water on ^{arrived} ~~very~~ home!
= *Orthocentrus radialis*?]

Pontania sp. (probably *P. bella*: R.C.I.P. in Lett. 6.4.32) 107 em. 6.6.31.

6th Oct. 1930. A showery day, but sunny
intervals: very strong SW-W winds. Day after
the disaster to airship R. 101 in France!
Georgia's ^{1st} monthly holiday!
Drove to Newbridge & then towards Rathangan.

but not so far, then round Hill of Allen, back &
ascended, & home. Co. KD.

On N. side of Hill of Allen saw *Bombus agrorum*
(several) (♂ at least) & 10♂ each *Halictus calceatus*
& *H. fuscipes* on Ragwort-flower.

On return journey caught an ich. in water just
W. of Naas, Co. KD; at canal bridge.

12th October 1930. A beautiful day! Very warm sun
most of the time & only a few stray clouds in morning, but
very cool W. breeze. Plenty of flowers out!
Meeting of the Waters, Arona, Co. WI. 11-45 till 3-30 pm.
Scrub on rt bank of river by ry. bridge above Castle Howard
gate = 1. Hedge of field on left bank of river above
next ry. bridge over river = 2.

Bombus agrorum ♂♂ at 1 & 2. *B. lucorum* 1 ♀ on ry. at 1.

Halictus rubicundus 1 ♂, several fresh ♀♀ above 1 on ry.

H. calceatus ^{10th} 1 ♀ on ry. at 1. *H. albipes* 1 ♀ at 1 on ry.

H. fuscipes ♂ & ♀ on ry. above 1. } all *Halicti* on *Leontodon*

H. villorum ♀♀ on ry. above 1. } or other composites.

Vespa vulgaris nest in full swing at 2 & 1 ♂ taken on wing.

Athalia ♂ at 1: the only sawfly seen!

P. T. O.

12.10.30 cont. Meeting of the Waters cont.

Amphylus suberivus ♀ seen at 1.

Pimpla instigator large ♀ seen at 1.

P. brevicornis ♀ at 2. P. detrita ♀ ♀ at 2.

Polyrhina multicolor ♀ at 2.

Homocidus pictus 1 ♀ at 1. H. pallipes 1 ♂ at 1. Promethes pulchellus 1 ♀ at 1?

Bassar tricolor 3 ♀♀ at 1.

Lagarctus (Mordicus) debitus ♂ on thistle at 2; also a black ♀ (? at 2).

Stenomacrus ventralis 1 ♀ at 1. also the small spotted fly

Exochus caerulescens ? 1 ♀

Removal to 121.

[Pontania 2000 (probably P. bella : see R.C.L.P. in litt. 6.4.32).]
? when bred

15th Oct. 1930. 2-30 till 4-30 pm. The third very warm humid day in succession. Fine in Dublin after 10 AM, but not in Portlaoine till just before our arrival. Very dull.

Portlaoine demesne, Co. WI.

1 = just above Tinnahinch gate. 2 = at back of river just below the deer park gate.

15.10.30 cont Portlaoine demesne, WI.

No Bombs or even Vespa seen.

Emphytus serratorius ♀ flew into water close to the middle lodge, just above it - it was discovered on screen by Hey!

Removal to 121.

Several small spotted flies of the same sort as seen on the 12th at 2.

Black & white fly at 1. 2 white-headed beetles seen on the 12th at 2.

Removal to 121.

Stenomacrus ventralis ♂

19th Oct. 1930. A cold wet day, with floods & gale in afternoon. Not out at all!

22nd Oct. 1930 Afternoon. After a fine morning it turned to rain just as we arrived at Enniskerry, Co. WI. Saw one ich. & Vespa vulgaris ♀♀ on my Horsem.

26th Oct. 1930. A dull day: with rain later.
Cold NW wind in morning but mild in
afternoon.

Devils' Glen, Co. Wicklow (Demesne & Glen)
with George. 11.30 till 4 pm.

Hymenoptera (i.e. small species) very abundant!!!
Schneumon deliratorius ♀ at Ivy Blossom in Glen.

Pimpla maculator ♀ beaten out of Spruce at top of Glen.

P. turinellae several ♀♀ swept in Glen.

P. w-dentata ♀, with pale red hind tibiae!

Several species of Plectiscidae, Atractodes,
Proctotrypids, Braconids & ? swept in
demesne & Glen.

Microcharus ^{villigeri} ♂, ^{Orthocentrus} ♂, ♂, ♂.

Stenomacrus ventralis ? 5 ♂♂, 1 ♀.

Orthocentrus ^{pubescens} ♂ 1 ♀

Alexander ^{sectator} (1 ♂, 1 ♀) (1 ♂, 1 ♀)

Formica rufa nest very dilapidated & few ants seen; but
several beaten out of Spruce 15 yards below nest!

29th Oct. 1930. A dull, damp, warm day before a
depression: had five minutes collecting before rain
came on.

Bahernabreen, Co. DU. Beaten off Ivy Blossom
by the fallen blocks of conglomerate just above
Mr. Doyle's.

1 Proctotrypid & 6 Schneumonids.

Stenomacrus ventralis 1 ♂, 3 ♀♀.

Orthocentrus ^{pubescens} 2 ♀♀.

9th Nov. 1930. A warm morning, cold afternoon, very
wind with rain falling in the wind ^(W) most of the day.
Walked with Hugh from Whitechurch bus via St. Columba
& back by Sandypod road to Rathfriland, Co. DU.
Vespa vulgaris ♀♀ on Ivy Blossom & no doubt ticks. Had
the beating tray with me.

11th Nov. 1930. A fine sunny day, but with very cold W. wind. 2-30 till 4.0 pm.

Glen above Enniskerry (1/2 a mile), Co. WI.

About a couple of dozen ichs. & braconids feeding off ivy blossom, hazel, oak &c. (mostly off ivy!).

Stilpnus

~~Stenomaerus ventralis~~ Stenomaerus ventralis 10♂, 3♀♀.

Orthocentrus ♂? *Orthocentrus niger* (Hbst.) (= *communis* var. *norm.*).

Sp. ? near Plectiscus, but not Plectiscus. 1♀ with very long terebra.

Pezomachus ♀ beaten out of ivy.

Daenusa

15th Nov. 1930. A wet morning & a cold clear afternoon!

Drove J. K. Kavan (Edinburgh) to Mountmellick, Co. WI. to look for Vertigo genesii &c. Passed some very nice ground for insects between Ballybutter & Mountmellick canal, round about Emo Park. No hymenoptera seen during the day.

16th Nov. 1930. A glorious day, with hot sun, but cold N. breeze.

Drove J. K. Kavan via Clonsilla to Leixlip to get Amphipepla glutinosa in Royal Canal.

No hymenoptera seen!

23rd Nov. 1930. A beautiful day, after a very stormy wet day & bitter cold night. First snow on the hills & Secaucu almost white. Much sun up till 2 pm & quite hot in shelter. With E. wind.

Drove via Nun's Cross to Clara, Co. WI.

Verpa myrica ♂♂ very busy at ivy blossom near Nun's Cross.

In oak wood below Clara Bridge & especially behind the sand flat & about the Cross Burn ichs. abundant at ivy blossom & also feeding off Vaccinium &c. Ouching & I also got about a dozen in rotten logs in hibernation.

Stenichneumon defraudator? 3♀♀ in hibernation.

Stenichneumon defraudator 9♂. hibernation.

Stenichneumon defraudator (18♂♂) in hibernation.

All not feeding off ivy &c.

P.T.O. →

23 Nov. 1930 cont. Clara road, Co. WI.

Beaten off ivy, Vaccinium & "

Pimpla rufata. ♀♀ & P. ix. dentata 2♀♀ all off ivy.

P. tunonellae 2♀♀ on ivy

Phyophanta multicolor 1♀ on ivy.

Orthocentrus protuberans? 2♀♀. O. (conspicua?) 4♂♂, 2♀♀?

O. (repentinus?) 1♂ like "conspicua" but less yellow on femur & "

Stenomacrus ventralis 2♂♂. S. parvicornis? 1♀.

30th November 1930. A beautiful morning, after 3 days frost & frosty night (Dublin in thick fog!). Kilmashogue, Co. DU. Walked up lane from K. school & across moor & back by St. Columba's. Many wasps on ivy behind college! Beat the following spp. off ivy blossom in lane above school & behind college.

Dacnusa areolaris? 4 on Asperula ^{pallidipes} 1♂

Hemiteles spp. 4♀♀. Stenomacrus? 1♂

Orthocentrus protuberans 2♀♀

Cynipid 1

3rd December 1930. A dull day, mild & calm (foggy in Dublin) after a couple of dull dripping days. Worked ivy on trees above Mr. Dwyer's at foot of Glenasmole (Bohernabreena), Co. DU.

Dacnusa areolaris? very abundant? 1♂, 2♀♀

O. (repentinus?) 1♂. Stenomacrus? 1♂

Proctosiphid 3♀♀.

Cynipid 2

Campoplegid (Angitia?) 1♀

Stenomacrus ^{ventralis} 6♂♂, 9♀♀, semi-testaceous sp. with pale yellow stigma.

Therion? 1♂

7th December 1930. A cold clear day after a wet night!

11.0 till 12.30 noon. Enniskerry & The Dargle, Co. WI.

All beaten off ivy blossom, but this too wet for good results.

Hemiteles ♀ between the roads N. of Enniskerry.

Stenomacrus ventralis? ♀.

Dacnusa 3♀♀

Cynipid 1♀

[Also took 1♀ Cynipid at the Co. Dublin side of the Scoop on way home!]

Vespa vulgaris at Enniskerry & Tinnahinch, ♀♀ +

also 2♂♂ at latter place.

10.12.30. A cold stormy afternoon! Slide of Saggart, Co. DU. Beat out of ivy blossom. Stenomacrus ventralis? 1♀. Orthocentrus conspicua? 1♂. ? St. flavicornis?

14th December 1930. A very cold day with heavy, shower about 11.30 AM., after a couple of cold stormy & wet days.

Drove via Phoenix Park to Lucan & Lome, Co. Du. Stopped at the "Furry Glen" in the park, there some good ivy still in flower on old thorn trees, but only one clump yield hymenoptera: namely, *Stenomacrus ventralis* 2 ♀♀, 1 *Proctotrypid* ♀ & many *Dacnusa areolaris* (? all ♀♀). Too early, windy & cold!

Then drove on beyond Knockmaroon & worked the east-end of Luttrellstown wood (Woodlands), there in one "beat" from ivy in kind of old quarry I had many many dozen if not some hundreds of *Dacnusa* on the tray: and only 1 *Stenomacrus ventralis*. Nothing else seen & none taken from this place, but the place might pay in summer!

21st December 1930. A nice day after a slight frost at night, but rather dull. Drove to the ^{col} ~~cott~~ between "Carrigrohilly" & The Scalp, Co. Dublin. Beat ivy blossom in lane behind Kingston Lodge (=1) & on S. side of the col. above Ballyman (=2).
Dacnusa ♀, *Stenomacrus* ♀ &
Bracon ♀ & Chalcid at 2.

231.

232.

1931.

1st Jan. 1931. A fine frosty day with blue sky & warm sun. George with meadow, so Hugh & I drove up to Brady's in Glensmole, Co. DU. & walked round upper reservoir. On way home stopped & beat some ivy below calcareous cliffs behind Mr. Doyle & got 2♀♀ Sacusa.

2nd Jan. 1931. Another perfect winter day! Drove Hugh to New Castle, ^{Co. WI.} & walked S. for a mile & back. Shook roots of Prunus for ticks. but only got a few beetles.

3rd Jan. 1931. Another perfect winter day, also! Drove Hugh to Killiney, ^{Co. DU.} & ascended till from sea side. On way up through Victoria Park I beat a few bits of ivy, Horseshoe & got 3♀♀ Stenomacrus.

4th Jan. 1931. A still finer day! Drove Hugh & M.B. ^{Margaret} to Arklow Head, Co. WI. & walked over head to Arkintony; afterwards called at "Norton" & drove home. Nothing collected except Linnaea (Riccia 2 sp.).

8th Jan. 1931. The eighth frosty day! See just having but depression approaching from N.W. & after a cloudy morning with hot sun, very cold & windy by 11 AM. Worked ivy in old lane behind St. Columba's Coll., Co. DU. but only got 1♀ Sacusa.

22nd February 1931. A cloudy day, but strong W. wind. Drove to Ballyhenry quarry, WI. There spent 1½ hours in hot sun & shelter. Two Chalcids & beetles beaten out of gorse (in flower) but no other hymenoptera seen. Then drove on to Mun's Cross & walked to foot of Devil's Glen & back.

15th March 1931. The record of two beautiful spring days, after very bitter cold & windy fortnight. Drove to Ballyhenry quarry WI. & spent a hour there (11.0-12.0 noon): a few willows out along road but none out there: saw only 1♂ Meloe proscarabaeus but no Bumble & no Andrena. On way home, 12.30, called at sandpit at bottom of Glen of the Downs where saw one of Honey Bee on a dandelion, but nothing else.

22nd March 1931. A bright sunny day with cool breeze from S. With A.A.L.

11.30 till 2.0 pm. (+ Ballyhenry quarry & marsh, Co. WI. (=2) (=3)

Kilmartin Channel (=12)

Bombus lucorum a few ♀♀ seen at willows at 1 & in field beyond 2 & opposite 3. One ♀ working!

B. terrestris 2 ♀♀ just out on willows in field opposite 3.

Andrena clarkella ♂♂ common at 2.

Andrena sp.? ♂♂ seen at 1 which looked like praecox or apicata, but may have been clarkella.

Peacock Butterfly at 1 & Tortoiseshell at 2.

22.3.31 cont. afternoon. Very hot-run!

N.W. edge of scrub at N. end of Deputy's Pass, WI.

2.30 - 3.30 pm. There is very good ground along small stream gully along N. edge of old wood!

Andrena praecox ♂♂ flying over dead bushes (A.A.L.)

A. clarkella ♂♂ & 1 fresh ♀. Latter twice seen on grass stem & ♂♂ round same & settling on tree trunk

♂♂ in hot-run.

Amthytela = crispatorius var.? ♀ on side of bank.

Schneumon (♀ like superbus) seen near same place.

25th March 1931. A fine sunny day but with cold E. wind in morning, drove to Lucan via Knockmaroon, home via Glendalkin, Co. Du. Nothing out at any place visited & no Bumble on willows along Liffy at Knockmaroon, though there in full flower. Near Esker, S. of Lucan discovered a fine drained sand pit & also nice ground in valley of Griffioen River W. of sand pit. Much Menyanthes & Viola myrsinitis out here!

afternoon 25.3.31. Glenside & Eniskerry, Co. WI. very sheltered & hot-run!
1 = bank at E. side of marsh between roads N. of Eniskerry
2 = sand-cliff facing S. 1 mile up Glenside (= Glencallen)

Bombus lucorum a few ♀♀ seen at willows at 1.

Seen 2 willow bushes well out by stream

Andrena apicata ♂♂ common on trunks of trees & at 1. Also V. myrsinitis ♂♂ at 1.

A. praecox 1 ♂ taken on great cliff of glacial sands at 2.

A. gryneus - Very fresh ♂♂ at 1.

A. nigrescens 1 ♂ seen at 2, almost certainly this species.

29th March 1931. One of the worst possible days! After nearly a fortnight's beautiful weather soft warm rain came on on Sat. morning (28th) & during the night a cold "jam" formed & today we had half a gale from S.E. with sheets of cold rain & sleet. Drove with AM from to Ashford & home.

3rd April (Good Friday) 1931. A dry cold day with strong N. wind & very occasional sun bursts, after a dreadful week of six wet days & six almost wet nights (cold, sleet, snow in mountains, & great floods everywhere) which completely killed off all the bees tempted out previously.

Drove to Ballyhenry Quarry, Co. WI. 11.30 till 12.30

Andrena apicata on or two ♂♂ seen & possibly one ♀.

A. clarkella several ♀♀ running on stones, etc.

Bombus terrestris 1 dead ♀ clinging to grass!

Then drove on to meeting of the Waters, Antrim, WI & stayed till 3.30: very cold here & practically no sun. Spent Took two *Andrena* ^{*apicata* } 1 ♂} _{*praecon* } each} on ♀ willow in veg. cutting below Castle Howard.

Collected several old *Trichostema lucorum* cocoons on birch at same place, two of which had very tiny holes in them, unlike those made by any parasite & less capacious of.

On way home stopped & examined very good ground in channels on south side of Carrick Rd. near the "water flash" between Artford & Glenashy!

Willow Warbler
- Ballyhenry Sand
- Alder Grove
Martin (1) looking
over river
meeting of the Waters
Wood Antrim
W. S. road just
out below Castle
Howard.

9th April 1931. A glorious day.

Left notes at Greytown 10.30 AM & walked round Bray Head to Bray.

Along old railway S. of Bray Head saw a few aculeates on Cottopost, Sandalwood & Daisy: & in gully at commencement of old path saw head on ♀ *Salix*.

Bombus lucorum ♀♀, *B. zonellus* ♀♀ on Cottopost.

B. agrorum ♀♀.

Andrena nigrescens 1 ♂, *A. minutula* 1 ♂.

Leucophaea carbonaria ♂ on *Salix*, 1 ♂.

This ♂ agrees in all respects, except the black band of corac, with the ♀.
A.W.S. 22.8.1931.

9th 10th April 1931. Crossed via Liverpool to Berthamsted, Hants, to stay with Charles & Ethel.

11th April 1931. A very hot day, with some
morning & evening but dull during midday.
Went by bus to Tring & collected along
Grand Union Canal, N of bridge on road
from Tring to Balbourn = 1. thence to
Aldbury Overs, collecting along road, in
small chalk pit = 2. on foot of down. *Anemone Pulsatilla* just coming into flower;
then up slope to cut down Beech wood
where some nice *Soliva caprea* in flower
= 3. All in Herts (= HT.)

Bombus lapidarius ♀♀ frequent at 1 & 2.

B. terrestris ♀♀ abundant at 1 & 2.

B. lucorum ♀♀ not so common as last
but seen at 1, 2 & 3.

B. agrorum a pair ♀♀ seen.

B. hortorum ♂ & ♀ at 1.

Andrena gaebecki ♂♂ & ♀♀ common, many
styliform!

A. albicans 1 or 2 ♂♂ only at 1.

A. mirabilis ♂♂. Many at 1 & 2 & 3.

At one seen on *Geranium lucida* at 1 & on
Lamium album on road to 2.

A. nigrescens ♂♂ styliform, 6 *fulva* ♂♂ at 1 very fresh

A. dorsata (VPCBP) at 2

Halictus rubicundus 1 small ♀

H. rubicundus 1 ♀ at 1.

H. fulvipes ♀♀ common at 1 & 2.

H. morio 1 ♀ at 2.

Ormia bicolor 1 ♂ at 2

Phaenocarpa lyalinus small ♀ with *H. fulvipes*.

Rhyssalus aeneus ♂♂ in turf near Tring (to 1)

Dolerus rugulosus ... ♂ & ♀ at foot of down at 2.

D. punctellus { pale ♂ & ♀ with last at 2.

up } PCBP. ♀ crawling on down at 2.

Ichneumon ♂ in chalk bit at 2.

Scaptomyza costalis 1 beautiful ♀ crawling on short
turf of down at 2 near old small chalk pit.

Saw two Swallows & *Anemone Pulsatilla* just
coming into flower at 2.

Sunday 12th April 1931. A fine bright morning
but wind too cool & strong. No sun after noon!
Collected all over down (=1) & round Salix caprea
in out-down beech wood (=2) at Aldbury Chase,
Herts. With C.O. & Benson.

No new Bombs seen today.

Ormia bicolor ♀ taken by Benson at 1.

Andrena dorsata? ♂ at 1. A female, very small, at 2.

Halictus fulvipes ♀♀ at 1.

Andrena pygmaea ♂ at 2, ♀ at 1. Agrius ♂ at 1.

A. chryseola ♂ at 1.

Delium haematodes 2♀♀ on open down at 1
D. rugosulca ♂♂ & ♀♀ at base of down at 1
D. punctellii ♀ at 1

Lideria verticillata?

Rhyssalus aeneus ♂♂ in lane to 1.

Eupria at 1.

Blennocampa at 1. (Benson)

12.4.31 cont.

Anorchis common over down at 1.

Thymelicus sp.? at Salix at 2.

Ophion sp. very dark red & polished ♂♀ at 1 (C.O.)

Brachypterus brachypterus at 1 (Benson).

13.4.31 Spent day in London.

14.4.31. Left London by 10.30 AM for Repton
Atterbury, Derby. In afternoon had short
walk with P.C.L. & John Barker, but too
late & only Bombus terrestris 1♀, agrorum 1♀
Anthophora fulva 1♂ seen. The last in the
first Anthophora I have ever seen alive
& looked more like a big Hover Fly than
I should have thought possible.

15th April 1931. A dull, chilly, windy day
 & no sun till late in afternoon.
 Went by bus with Dr. R.C.L. Perkins & two sons
 to Easton (Torquay reservoirs), E. of
 Chudleigh, Devon.

Bombus lucorum & *terrestris* only seen. ♀♀

Formica rufa & *fusca*.

Myrmica scabrinodis.

Anomalus among bracken & ferns.

Acrotylus *repens*? ♀ - given by same.

Proctos *lympha*, & some *Chalcid* (including
 longhorn) beaten out of spruce &c. by R.C.L.P.

Pimpla maculata ♀♀ commonly beaten out
 of spruce.

Dolerus *acutus* 1 ♀ beaten out of spruce.

Rhyssalus *anemone* 2 ♀♀ on docks in lane.

Amphisp. *crispatoris* var? ♀ taken by J.F. Perkins.

2nd ♂ *Phygadeuon afflictor* Grav.
 (blackish, seen here 26-jointed antennae (3rd 11-joint, 4th 12-joint, 5th 14-joint with
 second yellowish, 15th 22-joint; one tube at end of 14th joint!))

16th April 1931. *Andrena spingera* 2 ♀♀ & *C. praece* 1 ♀
 taken by A.V.S. at 9 AM. near Clay Pits at west
 side of Newton Abbot, Devon. Also 1 ♀ *Anisura* *repens*
repens (R.C.L.P.)

16th April 1931. A cold day with ^{strong} NE wind
 but considerable sun in morning & short sun
 bursts throughout the day. Very little rain.
 9.0 AM. Took *Andrena spingera* 2 ♀♀ &
Anisura repens 1 ♀ at Salis in clay
 pit at west side of Newton Abbot.
 11.0 AM. till 3 PM. Bony Heath, with
 Dr. R.C.L. Perkins & two sons.

Bombus terrestris, *lucorum* & *praece* 0. ♀♀.

Anthophora pilipes 100 (J.F.P.).

Andrena albicans ♂♂, *A. nivalis* ♂ & ♀ (R.C.P.).

A. clarkella ♂ & ♀. *A. dorsalis* ♂ & ♀♀ frequent.

A. praece ♀♀.

Habitus *collocata* 1 ♀. *H. morio* ♀♀. *H. punctatissima* 2 ♀♀.

Nomada fulvicornis ♀♀. *N. anceps* ♀♀.

Sphex heringi ♀ (detonated) (R.C.P.).

Pompilus *nitens* *detonatus* ♀♀.

Formica rufa 1 ♂. 7 *caserta* many ants. 7 *praece*.

Lasius *rupestris*.

Tapinoma *erectum* 1 ♀ on sandy bank: apparently lost!

Leptothorax *acutus* 3 ♀ (R.C.L.P.).

16.4.31 cont. Boring Heath, Devon.

Dolichopus punctatellus ♀ (R.C.L.P.)

Chrysopa conspersa ♀ com.

Emmuraena vibratrix ♀ (R.C.P.)

Pimpla maculata ♀ (beetle?) R.C.L.P.

Pezomachus ♀.

Two small beetles under bark (T.F.P.) ♀

17th April 1931. A cold windy day & with
considerable but short sun bursts in morning.

11 till 1 pm.

Bradley Wood, Newton Abbot, Devon.

with R.C.L.P. & John Perkins.

Bombus terrestris several ♀♀. *B. lucorum* 1 or 2 ♀♀.

Andrena albicans ♂♂ & 1 ♀. *A. dorsata* ♂♂ & ♀♀.

A. cineraria ♂♂ & ♀♀. *A. nitida* 1 ♂ on Taraxacum.

A. minutula 1 ♀.

Halictus lucigater one very fresh ♀ (R.C.L.P.)

Labelled

Newton Abbot
SD. AWS.
17.4.31

17.4.31 cont. Bradley's Wood, Newton Abbot, Devon.

1 *Emmuraena* ♂ & 1 small ♂ with taken by R.C.L.P.

Agriotypus aratus Carter. One of the curious insects
was taken by John F. Perkins (I give to me!) on a
gravel flat by the river. It was stained by splashing
water over the gravel to drive out beetles.

[Benson tells me that Mrs. Grant has taken it near
London & is studying its life history.]

18th-20th April 1931. Very wet & stormy till 20th, which I
spent at B. Museum.

22nd April A fine morning, but little sun after
we left The Moat, Coombe, Surrey.

10 AM. *Andrena flavipes* ♂♂ common on terraces
at The Moat.

Bombus terrestris, *B. lucorum*, *B. agrorum*.

1 ♀ of last with blackish thorax.

6 pm *B. lapidarius* 1 ♀ & *B. hortorum* 1 ♀.

C.T.O.

22/4/31 cont.

12 noon till 2 pm. Windsor Park Berks.

1 = Pond near Ranger's lodge. ^{mostly dead & no real sun}
^{except short bursts at 1.}

2 = sand-pit near Black nest gate, Virginia Water.

Bombus terrestris & *lucorum* ♀♀ seen at 2.*Andrena dorsata* ♂♂ & ♀♀ (?) at 2.*A. minutula* ? 1 ♀ at 2.*Pompilus naticus* 1 ♂ at 2.*Stenomacrus* *madidus* ? 1 ♂ at 1.*D. cf. ?* 3 ♂♂ at 1.*D. cf. ?* 1 ♀ at 1.

22/4/31 aft. Very cold wind, no sun.

3.30 pm. E side of Farnham St. Pond, Surrey.

Andrena fulva 1 very fresh ♂ on Salix.

23rd April 1931. Went to Deal, E Kent. In afternoon
went to see H.C. Staggins at Margate & there
collected *Andrena fulva* ♂♂ & ♀♀ in the public
park & in his garden at Cliftonville; also took in
A. nigrescens at corner of Lorna Northdown Rd.

24th April 1931. A very sunny day but strong
southerly wind - almost a gale at Farnham.
Went by bus to Canterbury & collected in old
brick yard, ^{=1.} along ^{=2.} railway, to Whitstable & in
fields ^{=3.} south of railway about 1/2 a mile N.W. of
station. ^{♀♀ & ♂♂}

Bombus terrestris & *B. lucorum* ♀♀ on *Lamin. album*,*B. agrorum* 1 ♀ seen*Anthophora pilipes* ♂ seen at *Lamin. album*.*Andrena albicans* ♂♂ & 1 fresh ♀ seen.*A. tiberi* 2 very fresh ♀♀ at 3. ^{?? ♂♂ seen}*A. nitida* ♂♂ & fresh ♀ at 1 & 2. ^(at 2) *A. flavipes* ♂ & ♀*A. gravida* ♂♂ & ♀♀ abundant at 3. ^{all very fresh}*A. ruficornis* ?? 1 very fresh ♀ at 3. *A. dorsata* 1 fresh ♀*A. nigrescens* ?? ♂♂ at 1, 2 & 3. *Andrena* ♂♂ ?*A. jactans* ♂♂ & 1 fresh ♀ at 1 & 2.*A. minutula* ♂♂ *A. chequensis* 1 ♂*A. subopaca* ?*Hemiteles* (? of *H. lucorum*) seen at 2 on *Taraxacum**Habictus coleratus* seen at fresh ♀♀ at 2 & 3.*H. minutus* 1 ♂ seen at fresh ♀♀ at 1 & 2.*H. niger* ♂♂ abundant at foot of wall near 3.*Campoplex* cf. 1 at 1.

249

25th April 1931. Gale & rain from S
nearly all day. In afternoon walked
from S. Ireland to Deal but saw
no *Lupinus* etc.

26th April 1931. A dull day with only short hints
of sun & strong cold N.W. wind.

Blean Woods, near Canterbury, E. Kent, with
H. C. Higgins.

Bombus terrestris & *lucorum* ♀♀ seen.

B. pratorum ♀♀ on *Fallopia* in Blean Woods.

B. agrorum 1 ♀ with much black on thorax.

Andrena clarkella com ♀♀ on *Salix*.

Nothing else seen during day, except a few
Andrena *praeusta* at that time. Canterbury
also taken on 24.4.31.

27th April 1931. Left Deal at 10.20 AM
& returned to Dablin. Midlands of
England very greatly flooded & showing signs
of abnormal, bad weather.

250

